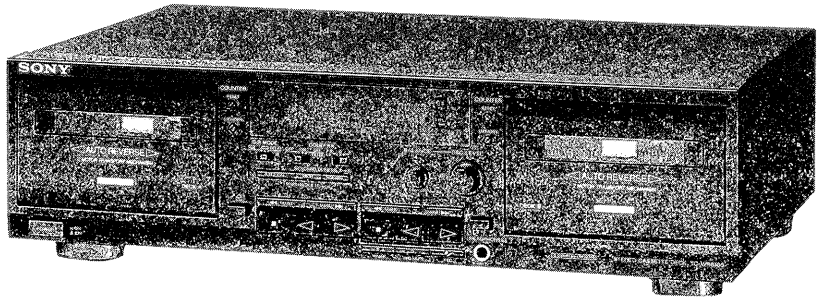
TC-WR635S

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model



Model Name Using Similar Mechanism		TC-WR521/WR590
Tape Transport Machanism Type	DECK A	TCM-190RA12C
	DECK B	TCM-190RB12C

SPECIFICATIONS

Recording system — 4-track 2-channel stereo
Fast winding time — Approx. 90 sec. (with Sony C-60 cassette)
Bias — AC bias
Signal-to-noise ratio (at peak level and weighted)

Cassette (Dolby NR off)	Type IV (Sony METAL-S)	Type II (Sony UX-S)	Type I (Sony HF-S)
	58 dB	57 dB	55 dB

S/N ratio improvement (approximate values)
with Dolby B NR on: 5 dB at 1 kHz; 10 dB at 5 kHz
with Dolby C NR on: 15 dB at 500 Hz; 20 dB at 1 kHz
with Dolby S NR on: 10 dB at 100 Hz; 24 dB at 1 kHz

Harmonic distortion — 0.4% (with Sony Type I, 160 nWb/m, 315 Hz, 3rd H.D.)
1.8% (with Sony Type IV, 250 nWb/m, 315 Hz, 3rd H.D.)

Frequency response (DOLBY NR off)

Type IV cassette (Sony METAL-S)	30 - 18,000 Hz (±3 dB,IEC) 30 - 13,000 Hz [±3 dB (-4 dB) recording]
Type II cassette (Sony UX-S)	30 - 17,000 Hz (±3 dB,IEC)
Type I cassette (Sony HF-S)	30 - 15,000 Hz (±3 dB,IEC)

Wow and flutter
± 0.13% W.Peak (IEC)
0.07% W.RMS (NAB)
± 0.18% W.Peak (DIN)

Inputs

Line inputs (phono jacks)	Sensitivity	0.16 V
	Input impedance	47 k ohms

— Continued on page 2 —

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

使用時は添付資料も参照のこと
Refer to the additional documents.

STEREO CASSETTE DECK

SONY®

Outputs

Line outputs (phono jacks)	Rated output level	0.5 V at a load impedance of 47 k ohms
	Load impedance	Over 10 k ohms
Headphones (stereo phone jack)	Output level	1 mW at a load impedance of 32 ohms

General

Power requirements	US, Canadian model : 120V AC, 60Hz UK, Australian model : 240V AC, 50/60Hz AEP, Germany model : 220-230V AC, 50/60Hz E model : 120, 220, 240V AC, 50/60Hz
Power consumption	25 W
Dimensions	Approx. 430 × 123 × 310 mm (w/h/d) (17 × 4⅞ × 12¼ inches) including projecting parts and controls
Mass	Approx. 4.5 kg (9 lbs 15 oz)

Supplied accessories

Audio connecting cords (2)

Design and specifications subject to change without notice.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

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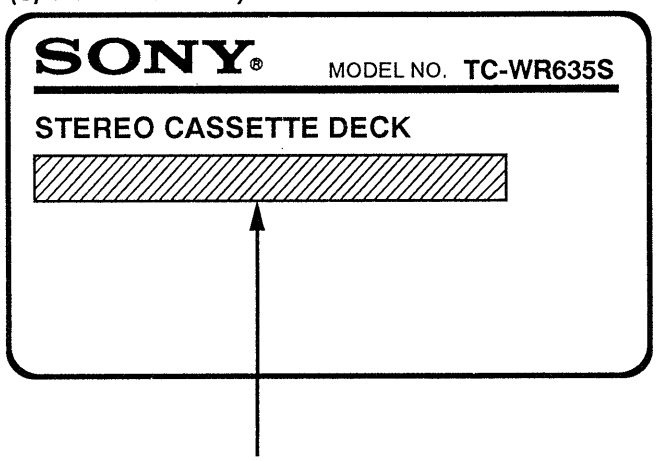
MODEL IDENTIFICATION
(Specification Label)



US, Canadian model : AC 120V 60Hz
UK, Australian model : AC 240V~50/60Hz
AEP, Germany model : AC 220-230V~50/60Hz
E model : AC120, 220, 240V~50/60Hz

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

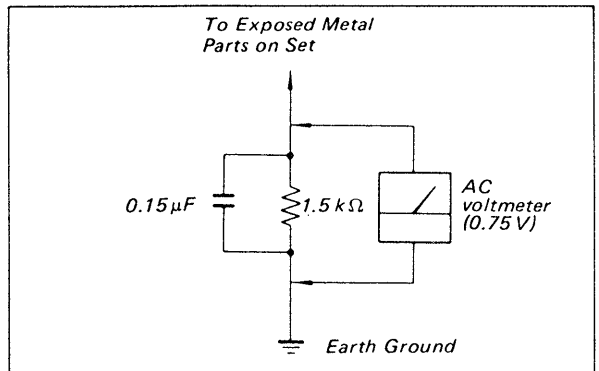


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

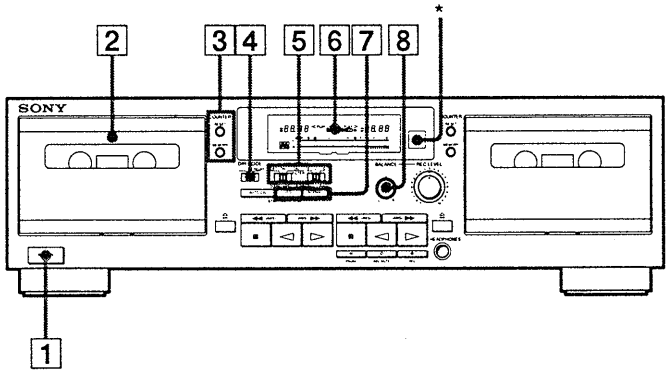
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

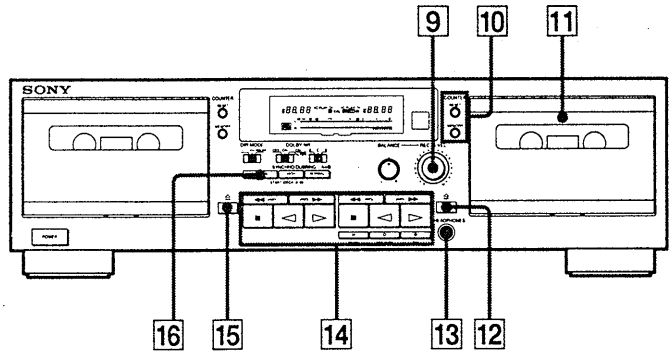
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1
GENERAL

This section is extracted from instruction manual.

1-1. IDENTIFYING THE PARTS





Front Panel

For details, refer to the page number(s) indicated in parentheses.

1 POWER switch
2 Deck A
3 COUNTER buttons (deck A)
RESET button
MEMORY button
4 DIR (direction) MODE switch
5 DOLBY NR (Dolby noise reduction) switches
OFF/ON/FILTER ON switch
B/C/S switch
6 Display panel
7 SYNCHRO DUBBING buttons
HIGH button
NORMAL button
8 BALANCE control

* Remote control sensor
You can remotely control this cassette deck with:
— A remote commander that came with a Sony amplifier or receiver if it has the R mark and cassette deck control capability.
— Any optional Sony remote commander with the R mark and cassette deck control capability.

(Continued on next page.)

Front Panel

For details, refer to the page number(s) indicated in parentheses.

9 REC (recording) LEVEL control
10 COUNTER buttons (deck B)
RESET button
MEMORY button
11 Deck B
12 ⏏ (eject) button (deck B)
13 HEADPHONES jack
(stereo phone jack)
14 Tape operation buttons
◀◀ (leftward fast winding) (Multi-AMS**) button
▶▶ (rightward fast winding) (Multi-AMS**) button
■ (stop) button
◀ (reverse play) button
▶ (forward play) button
❚❚ PAUSE button (deck B only)
O REC MUTE (record muting) button (deck B only)
● REC (recording) button (deck B only)
15 ⏏ (eject) button (deck A)
16 AUTO CAL button

** AMS is an abbreviation for Automatic Music Sensor.

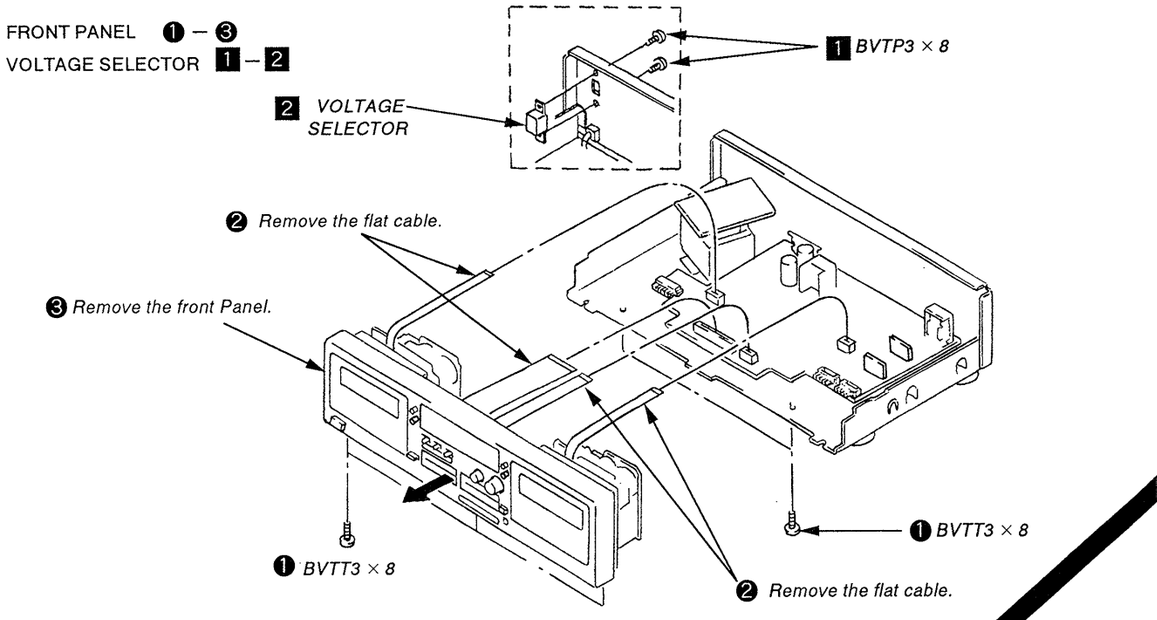
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

CASE
Unscrew the four case attachment screws M3 × 8 and remove the case.

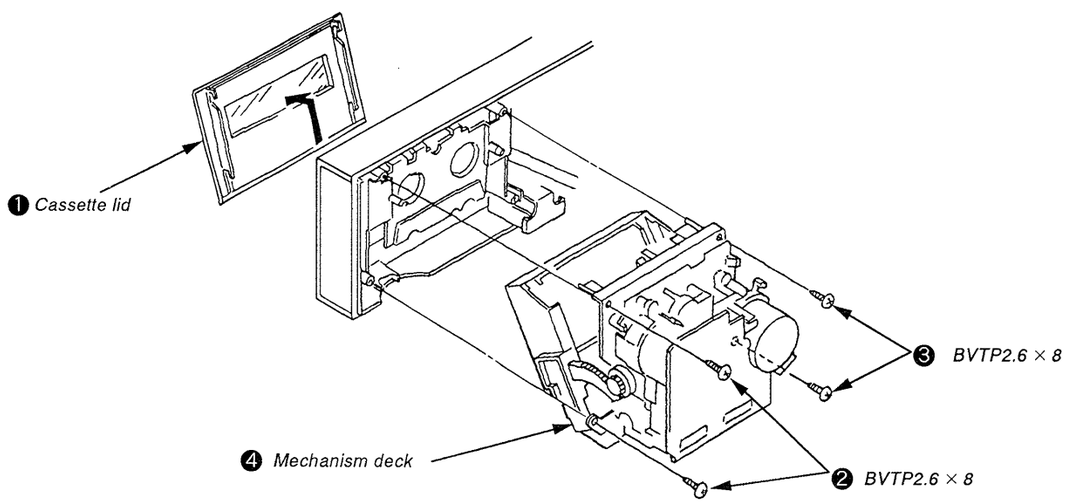
2-1. FRONT PANEL

FRONT PANEL ❶ – ❸
VOLTAGE SELECTOR 1 – 2

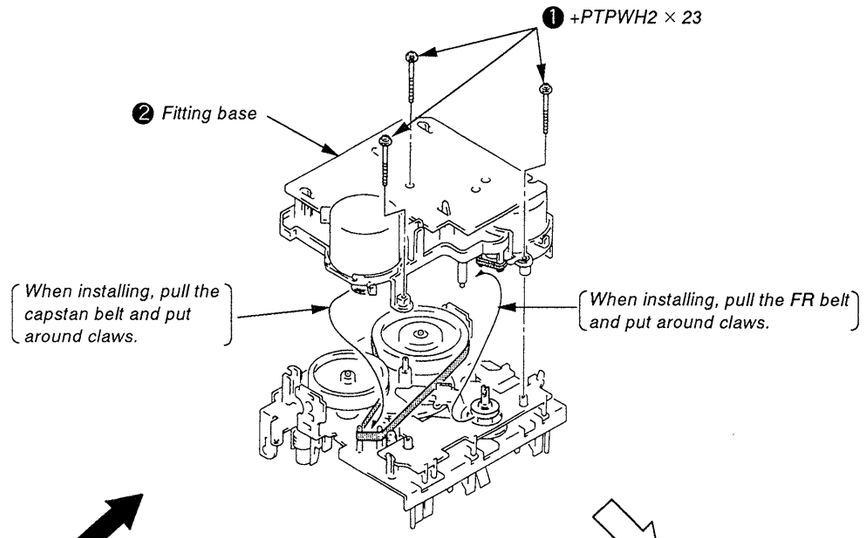


2-2 MECHANISM DECK

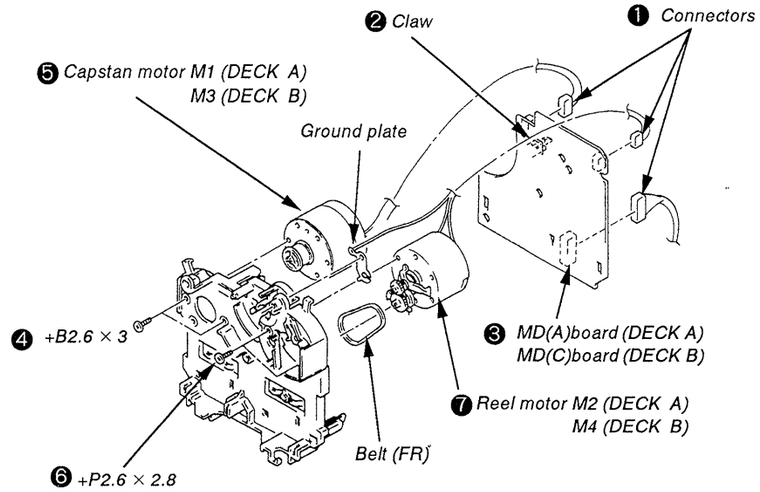
❶ Press the EJECT button.



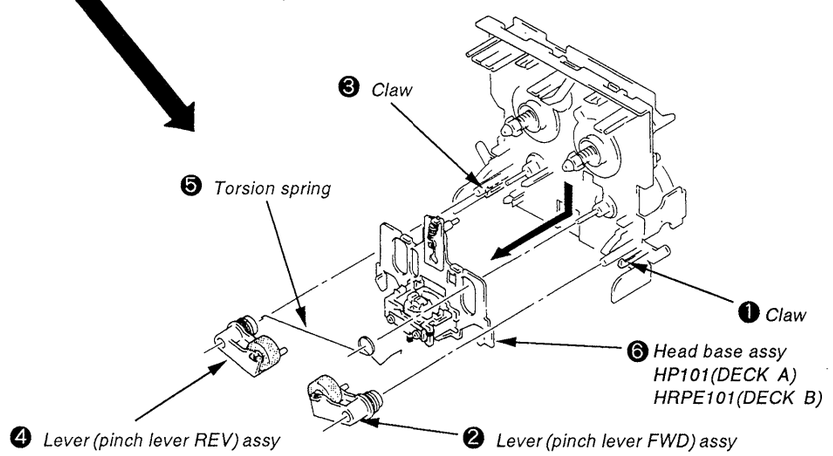
2-3. CAPSTAN MOTOR, REEL MOTOR


❶ +PTPWH2 × 23
❷ Fitting base
When installing, pull the capstan belt and put around claws.
When installing, pull the FR belt and put around claws.

Remove the cassette holder



2-4. HEAD, PINCH ROLLER



SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback/erase head　　pinch roller
   rubber belts　　capstan
   idlers
2. Demagnetize the record/playback head with a head demagnetizer. (Head demagnetizer do not approach for the erase head.)
3. Do not use a magnetized screwdriver for the adjustment.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

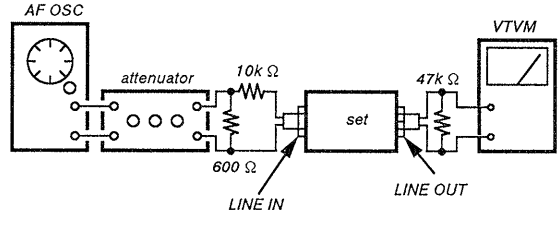
Torque	Torque	Meter reading
Forward	CQ-102C	30 to 65g • cm (0.42 to 0.9 oz • inch)
Forward back tension	CQ-102C	DECK A : 1 to 6g • cm (0.014 to 0.083 oz • inch) DECK B : 2 to 9g • cm (0.03 to 0.12 oz • inch)
Reverse	CQ-102RC	30 to 65g • cm (0.42 to 0.9 oz • inch)
Reverse back tension	CQ-102RC	1 to 6g • cm (0.014 to 0.083 oz • inch)
FF/REW	CQ-201B	70 to 120g•cm (0.98 to 1.66 oz•inch)

3-2. ELECTRICAL ADJUSTMENTS

PRECAUTION

1. The adjustment should be performed in the publication. (Be sure to male playback adjustment at first.)
2. The adjustments and measurement should be performed for both L-CH and R-CH.
   - Switch position
     DOLBY NR switch　　: OFF
     DIR MODE switch　　: ⇄
   - Standard record position :
     Deliver the standard input signal level to input jack and set the REC LEVEL control to obtain the standard output signal level as follows.

– Record Mode –



Standard Input Level

Input terminal	LINE IN
source impedance	10k Ω
input signal level	0.5V (– 3.8dB)

Standard Output Level

Output terminal	LINE OUT
load impedance	47k Ω
output signal level	0.5V (– 3.8dB)

Test Tape

Tape	Contents	Use
P-4-A100	10kHz, – 10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	PB Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

0dB=0.775V

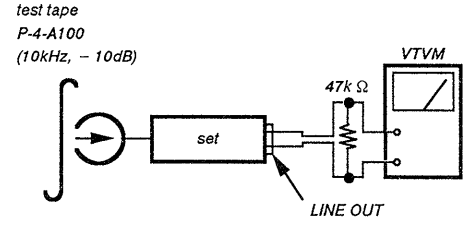
Test Mode

1. Insert a short-circuit plug into TP801 (2P) and turn ON the power switch. (Earth pin ⑲ of IC801 and turn ON the power switch.)
   At first, all the fluorescent tubes light up, then the system returns to normal display. (However, "0000" is not displayed on the counter.)
2. To release the test mode, remove the short plug and turn off the power switch.
3. Remove the short plug after completion of adjustment.

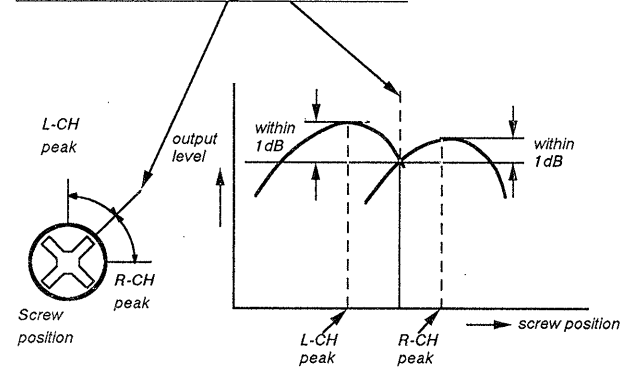
Record/Playback Head Azimuth Adjustment

Procedure :

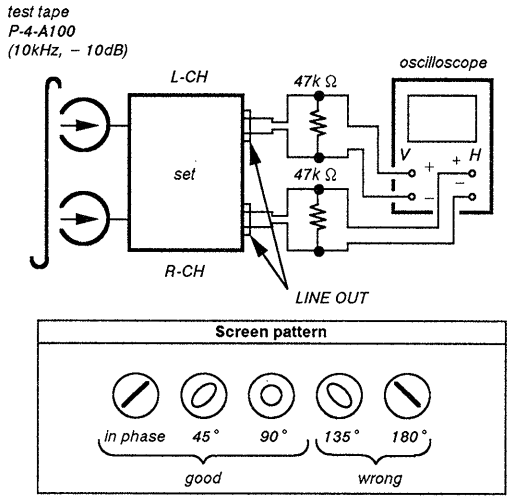
1. Forward playback Mode



2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.

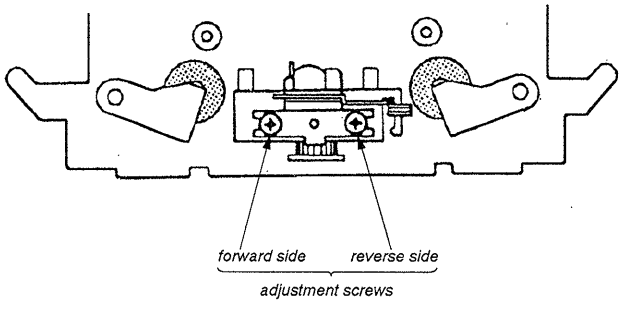


3. Playback Mode



4. Change the reveres playback mode and repeat the steps 1 to 3.
5. After the adjustment, lock the adjustment screws with suitable locking compound.

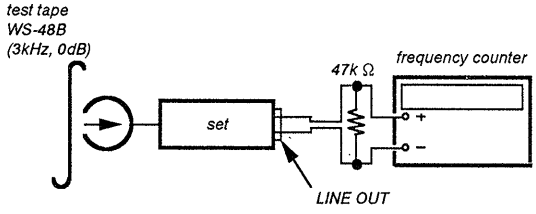
Adjustment Location : – record/playback head –



Tape Speed Adjustment

Procedure :

– Forward Playback Mode –



(high speed adjustment)

1. Connect ⑲ pin of IC801 to ground.
2. Set to FWD playback mode.
3. Keep on pressing the HIGH SPEED DUBBING switch.
4. Adjust RV72 so that the frequency counter reading becomes 6,000 ± 20Hz.

(normal speed adjustment)

1. Set to FWD playback mode.
2. Adjust RV71 so that the frequency counter reeding becomes 3,000 ± 10Hz.

Frequency difference between the beginning and the end of the tape should be within 3%.

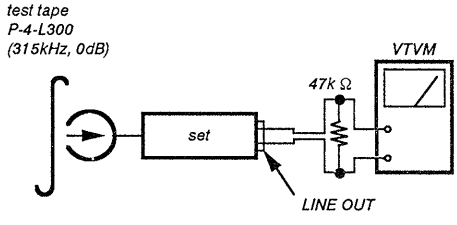
Frequency difference between the deck A and deck B the beginning of the tape should be within 1.5%.

Adjustment Location : AUDIO board

Playback Level Adjustment

Procedure :

– Forward Playback Mode –



Adjust RV11(L-CH) and RV21(R-CH) so the VTVM reading becomes the adjustment limits below.

Adjustment Value :

LINE OUT level : – 7.7 ± 0.5dB (0.301 to 0.338V)

Level difference between channels : within 0.5dB

Confirm the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

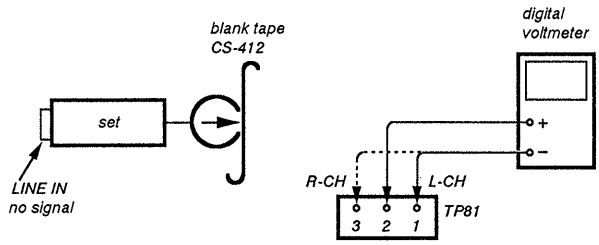
Adjustment Location : AUDIO board

3 Bias Consumption Current Adjustment

This adjustment should be performed when replacing the head assy or the bias oscillating transformer (T81, T91).

Procedure :

( ) : R-CH



1. Connect the digital voltmeter to test point TP81.
2. Set RV81 (RV91) to mechanical center.
3. Set to FWD record mode.
4. Adjust T81 (T91) so that the digital voltmeter reading becomes minimum.

Adjustment Value : Maximum 220mV

Adjustment Location : AUDIO board

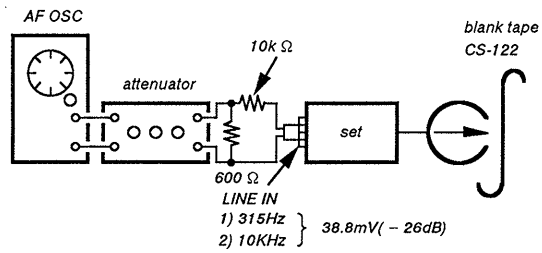
Record Bias Adjustment

Setting :

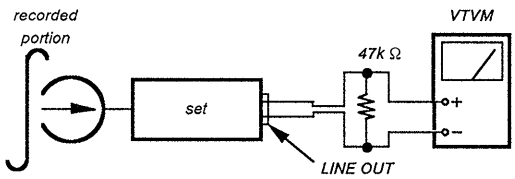
REC LEVEL control : standard record position (Refer to page 7.)

Procedure :

1. Record Mode



2. Playback Mode



Confirm that the 10kHz playback output is 0 ± 0.5dB relative to the 315Hz output. If necessary, adjust RV81(L-CH), RV91(R-CH) and repeat the steps given above.

Adjustment Location : AUDIO board

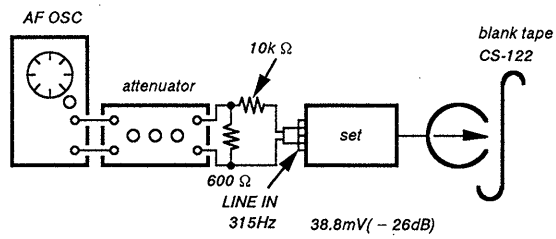
Record Level Adjustment

Setting :

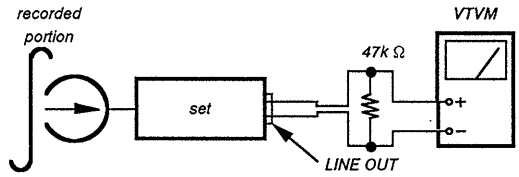
REC LEVEL control : standard record position (Refer to page 7.)

Procedure :

1. Record Mode



2. Playback Mode



Confirm playback the tape recorded become adjustment level as follows.

If necessary, adjust RV131(L-CH), RV231(R-CH) and repeat the steps 1 and 2.

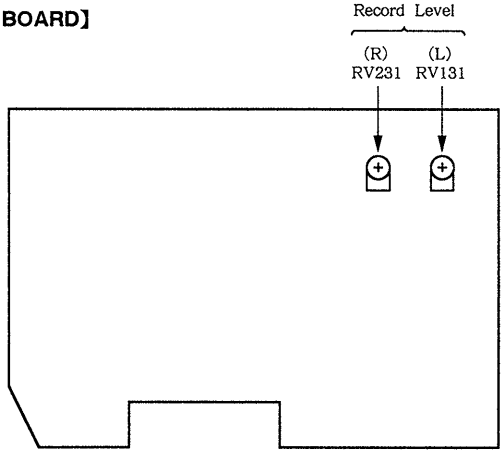
Adjustment Value :

LINE OUT level : − 26 ± 0.5dB (36.7 to 41.1mV)

Adjustment Location : MAIN board

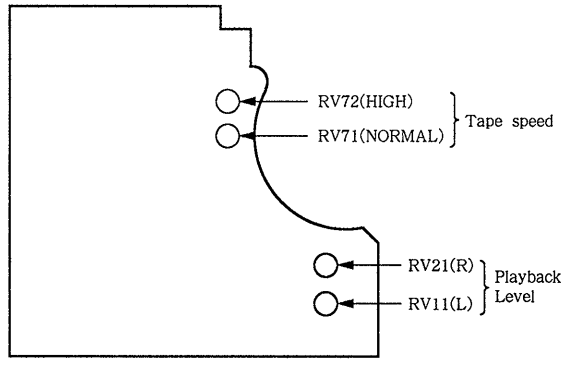
– Adjustment Parts Location Diagrams –

【MAIN BOARD】



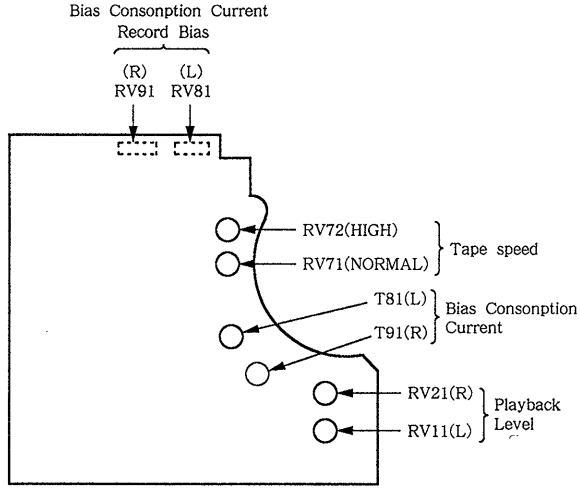
DECK A :

【AUDIO BOARD】



DECK B :

【AUDIO BOARD】



SECTION 4
EXPLANTION OF IC TERMINALS

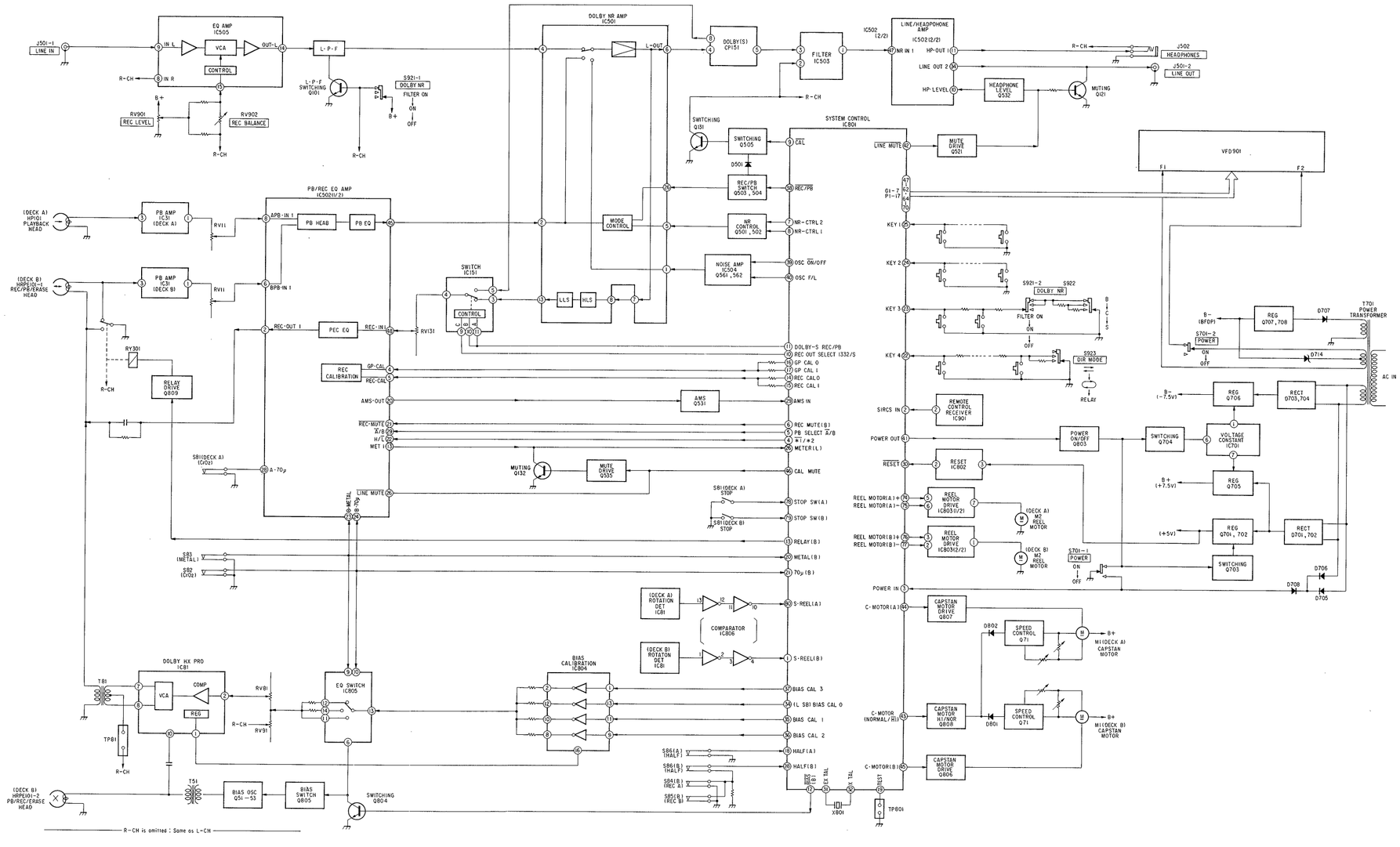
IC801 CXP82316-017Q

Pin No.	Terminal name	I/O	Terminal explanation
1	S. REEL(B)	I	S-Side reel rotation detection at B-deck.
2	SIRCS IN	I	Sircs signal in terminal.
3	POWER IN	I	Power OFF. OFF = 0V
4	$\overline{*1}$/*2	O	Normal/High selector for equalizer.
5	PB SELECT $\overline{A}$/B	O	Playback A/B selector. "L" : A-deck, "H" : B-deck
6	REC MUTE(B)	O	Recording mute ON/OFF. "L" : ON
7	NR-CTRL2	O	Dolby NR control. "L" : OFF, "M" : B, "H" : C
8	NR-CTRL1	O	Dolby NR control. "L" : OFF, "M" : B, "H" : C
9	$\overline{CAL}$	O	Calibration ON/OFF control.
10	REC OUT SELECT 1332/s	O	Recording 1332/s selector.
11	DOLBY-S REC/$\overline{PB}$	O	Dolby-S Playback/Recording selector.
12	$\overline{BIAS\ (B)}$	O	Bias ON/OFF at B-deck. "H" : ON
13	RELAY (B)	O	Recording/Playback selector at B-deck. "L" : Recording
14	REC CAL0	O	Recording calibration. "H" : ON
15	REC CAL1	O	Recording calibration. "H" : ON
16	GP CAL0	O	GP calibration terminal.
17	GP CAL1	O	Gp calibration terminal.
18	HALF (A)	I	Half pawl input for A-deck. "L" : Available
19	TEST	I	Test mode terminal. "L" : Test mode, "H" : Normal mode
20	METAL(B)	I	Metal tape selector terminal. "H" : Metal
21	70 μ (B)	I	CrO_2 tape selector terminal. "L" : CrO_2
22	KEY 4	I	Key input.
23	KEY 3	I	Key input.
24	KEY 2	I	Key input.
25	KEY 1	I	Key input.
26	METER(L)	I	Meter L-CH input.
27	METER(R)	I	Meter R-CH input.
28	HALF(B)	I	Half pawl input for B-deck. "L" : Available
29	AMS IN	I	AMS signal input terminal.
30	$\overline{RESET}$	I	Reset terminal. Reset : 0V
31	EXTAL	O	System clock output terminal.
32	XTAL	I	System clock input terminal.
33	V_{SS}	–	Power supply (GND)
34	(LSB) BIAS CAL0	O	EQ Bias calibration terminal.
35	BAIS CAL1	O	EQ Bias calibration terminal.
36	BAIS CAL2	O	EQ Bias calibration terminal.
37	BAIS CAL3	O	EQ Bias calibration terminal.
38	$\overline{REC}$/PB	O	Recording/Playback selector for Dolby IC. "H" : Playback
39	OSC $\overline{ON}$/OFF	O	OSC ON/OFF control. "H" : OFF
40	OSC $\overline{H}$/L	O	OSC H/L control terminal.

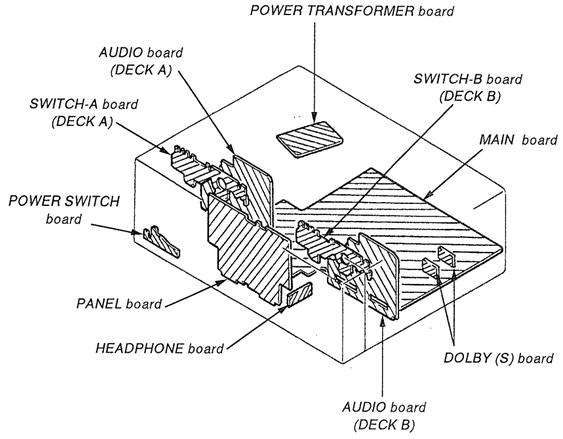
Pin No.	Terminal name	I/O	Terminal explanation
41	POWER OUT	O	Power ON/OFF
42	$\overline{\text{LIN MUTE}}$	O	Line mute ON/OFF. "L" : ON
43	C. MOT(NORMAL/$\overline{\text{HI}}$)	O	Capstan motor speed selector . "L" : Normal
44	C. MOTOR(A)	O	Capstan motor output at A-deck.
45	C. MOTOR(B)	O	Capstan motor output at B-deck.
46	CAL MUTE	O	Calibration mute. "H" : ON
47	P17	O	VFD Segment.
48	P15	O	VFD Segment.
49	P14	O	VFD Segment.
50	P13	O	VFD Segment.
51	P12	O	VFD Segment.
52	P11	O	VFD Segment.
53	P10	O	VFD Segment.
54	P9	O	VFD Segment.
55	P8	O	VFD Segment.
56	P7	O	VFD Segment.
57	P6	O	VFD Segment.
58	P5	O	VFD Segment.
59	P4	O	VFD Segment.
60	P3	O	VFD Segment.
61	P2	O	VFD Segment.
62	P1	O	VFD Segment.
63	–	–	Not used.
64	G1	O	VFD Grid.
65	G2	O	VFD Grid.
66	G4	O	VFD Grid.
67	G5	O	VFD Grid.
68	G3	O	VFD Grid.
69	G7	O	VFD Grid.
70	G6	O	VFD Grid.
71	VFDP	–	VFD Power.
72	V_{DD}	–	Power supply (+5V)
73	–	–	+5V
74	REEL MOTOR(A) +	O	Reel motor (+) output at A-deck. "H" : FF.
75	REEL MOTOR(A) –	O	Reel motor (–) output at A-deck. "H" : REW.
76	REEL MOTOR(B) +	O	Reel motor (+) output at B-deck. "H" : FF.
77	REEL MOTOR(B) –	O	Reel motor (–) output at B-deck . "H" : REW.
78	STOP SW(A)	I	Mechanism stop switch input for A-deck.
79	STOP SW(B)	I	Mechanism stop switch input for B-deck.
80	S. REEL(A)	I	S-Side reel rotation detection at A-deck.

SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM

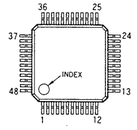


5-2. CIRCUIT BOARDS LOCATION

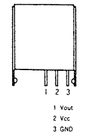


● SEMICONDUCTOR LEAD LAYOUTS

CXA1417Q
CXA1599Q

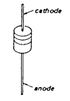


SBX1610-59

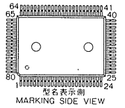


2SA473
2SD2012

HZS6A1L
UZL-7L2
11ES2
1SS120



CXP82316-017Q



DTA144ES
DTC114ES
DTC143TS
2SC2603-EF
2SD2144S

2SA1162

NJL5165K-B

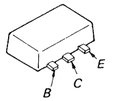
2SB1116A-L
2SD1387

1N4148M

PST572E

DTC144ES
2SA1175-HFE
2SC2785-HFE

2SD1622-S



1SS352

5-3. PRINTED WIRING BOARDS (MAIN SECTION)

• Refer to page 15 for Semiconductor Lead Layouts.

• SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
D131	G - 22	Q101	E - 16
D231	G - 22	Q121	B - 18
D501	F - 17	Q131	E - 17
D502	E - 18	Q132	E - 22
D531	D - 22	Q201	C - 16
D561	B - 13	Q221	B - 17
D562	B - 13	Q231	D - 17
D701	B - 23	Q232	E - 21
D702	B - 23	Q501	F - 17
D703	C - 23	Q502	F - 17
D704	C - 23	Q503	F - 16
D705	B - 23	Q504	F - 16
D706	B - 23	Q505	F - 17
D707	D - 23	Q521	B - 18
D708	E - 23	Q531	D - 22
D709	B - 23	Q532	F - 19
D710	B - 21	Q535	F - 22
D711	C - 21	Q561	B - 13
D712	C - 20	Q562	B - 13
D713	D - 22	Q701	B - 22
D714	D - 22	Q702	B - 22
D715	B - 24	Q703	B - 23
D716	B - 21	Q704	B - 21
D801	G - 13	Q705	B - 21
D802	I - 17	Q706	D - 21
		Q707	D - 22
IC151	D - 13	Q708	D - 22
IC251	C - 13	Q803	J - 18
IC501	D - 15	Q804	G - 14
IC502	D - 19	Q805	G - 14
IC503	D - 17	Q806	I - 17
IC504	B - 13	Q807	I - 17
IC505	B - 16	Q808	I - 17
IC701	C - 20	Q809	F - 15
IC801	I - 21	Q810	G - 21
IC802	H - 23		
IC803	G - 24	CP151	E - 13
IC804	H - 16	CP251	C - 13
IC805	H - 15		
IC806	G - 22		
IC901	J - 32		

• SEMICONDUCTOR LOCATION (DECK A)

Ref. No.	Location
IC31	D - 3
IC81	C - 10
Q71	D - 5

• SEMICONDUCTOR LOCATION (DECK B)

Ref. No.	Location
D31	I - 2
IC31	I - 2
IC81	H - 4 (AUDIO) H - 9 (SW-A)
Q51	H - 3
Q52	H - 3
Q53	H - 3
Q71	I - 5

Note:

- ○—: parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▒▒▒ : Pattern on the side which is seen.
- ▒▒▒ : Pattern of the rear side.
- ▭ : Chip components extracted from the rear side.
- G : Germany
  AUS : Australian

[AUDIO BOARD](DECK A)

[SW-A BOARD](DECK A)

[AUDIO BOARD](DECK B)

[SW-B BOARD](DECK B)

[MAIN BOARD]

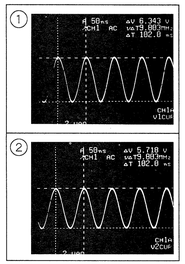
[HEADPHONE BOARD]

[POWER TRANSFORMER BOARD]

[POWER SWITCH BOARD]

[PANEL BOARD]

● WAVEFORMS



Note :

- All capacitors are in μ F unless otherwise noted. pF: μ μ F
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : Internal component.
- : fusible resistor.

Note :	Note :
The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- : B+ Line
- : B − Line
- : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : STOP
  ( ) : REC
  ( ) : CAL SW ON
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : PB (DECK A)
  : REC (DECK B)
  : PB (DECK B)
- G : Germany
  AUS : Australian

【PANEL BOARD】

【MAIN BOARD】

【HEADPHONE BOARD】

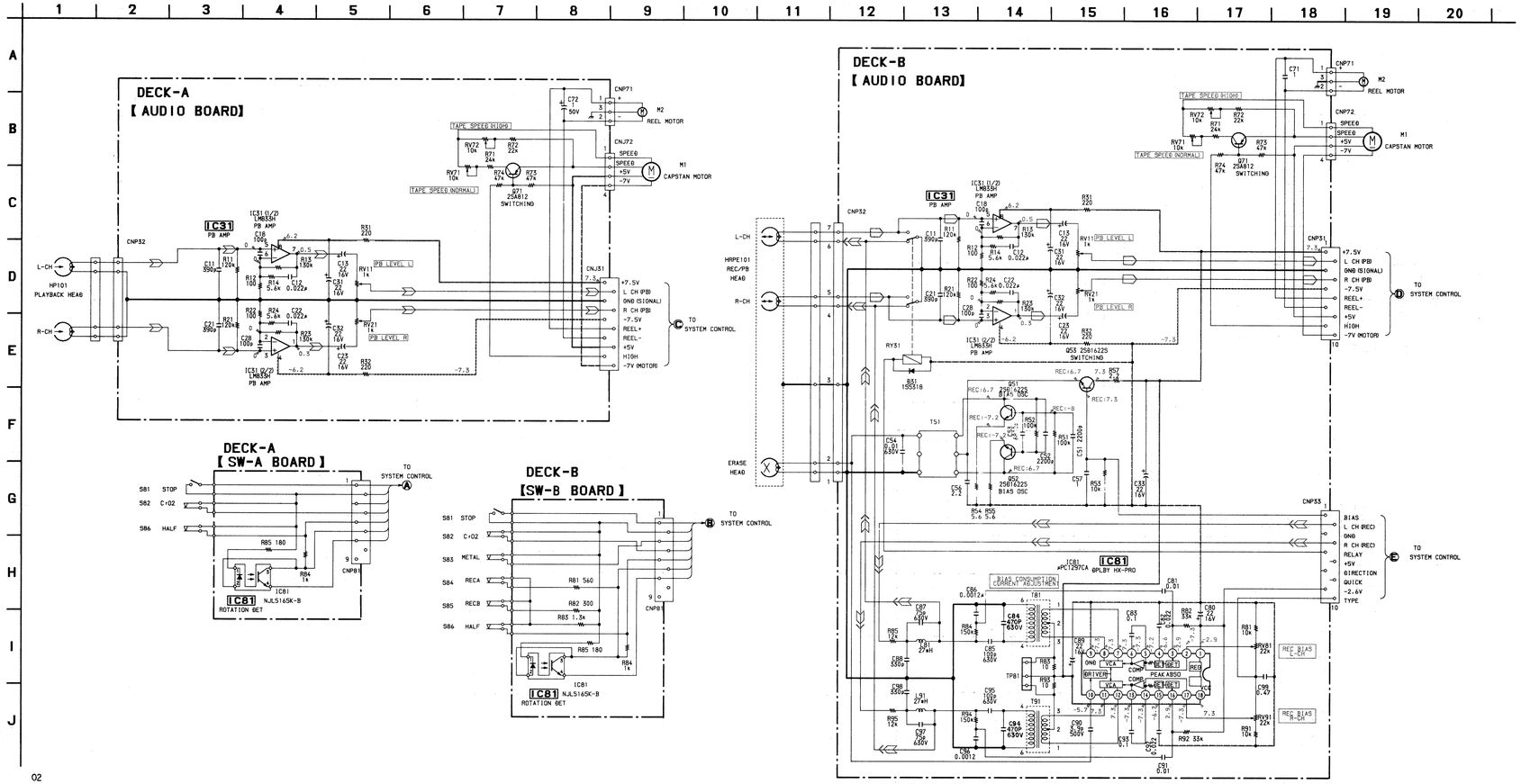
【POWER TRANSFORMER BOARD】

POWER SWITCH BOARD

5-5. SCHEMATIC DIAGRAM (AUDIO SECTION)

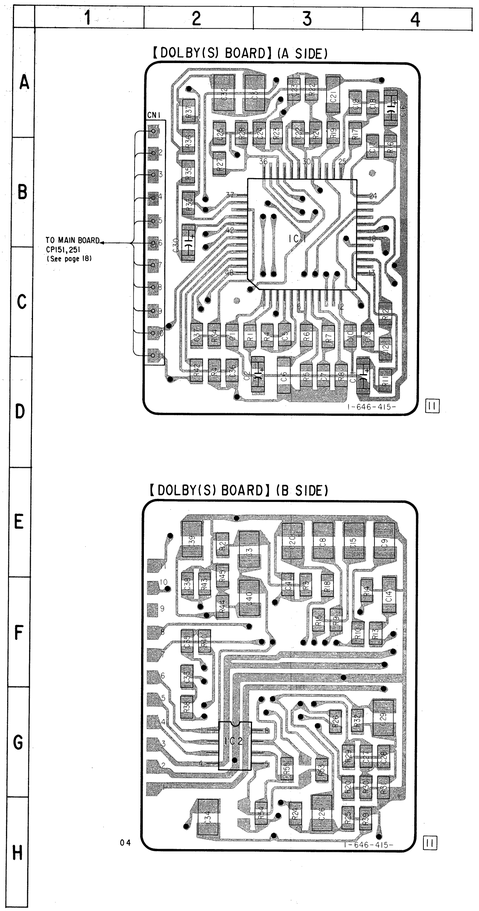
● Refer to page 21 for Note.

● Refer to page 33 for IC Block Diagrams.



5-6. PRINTED WIRING BOARDS (DOLBY (S) BOARD)

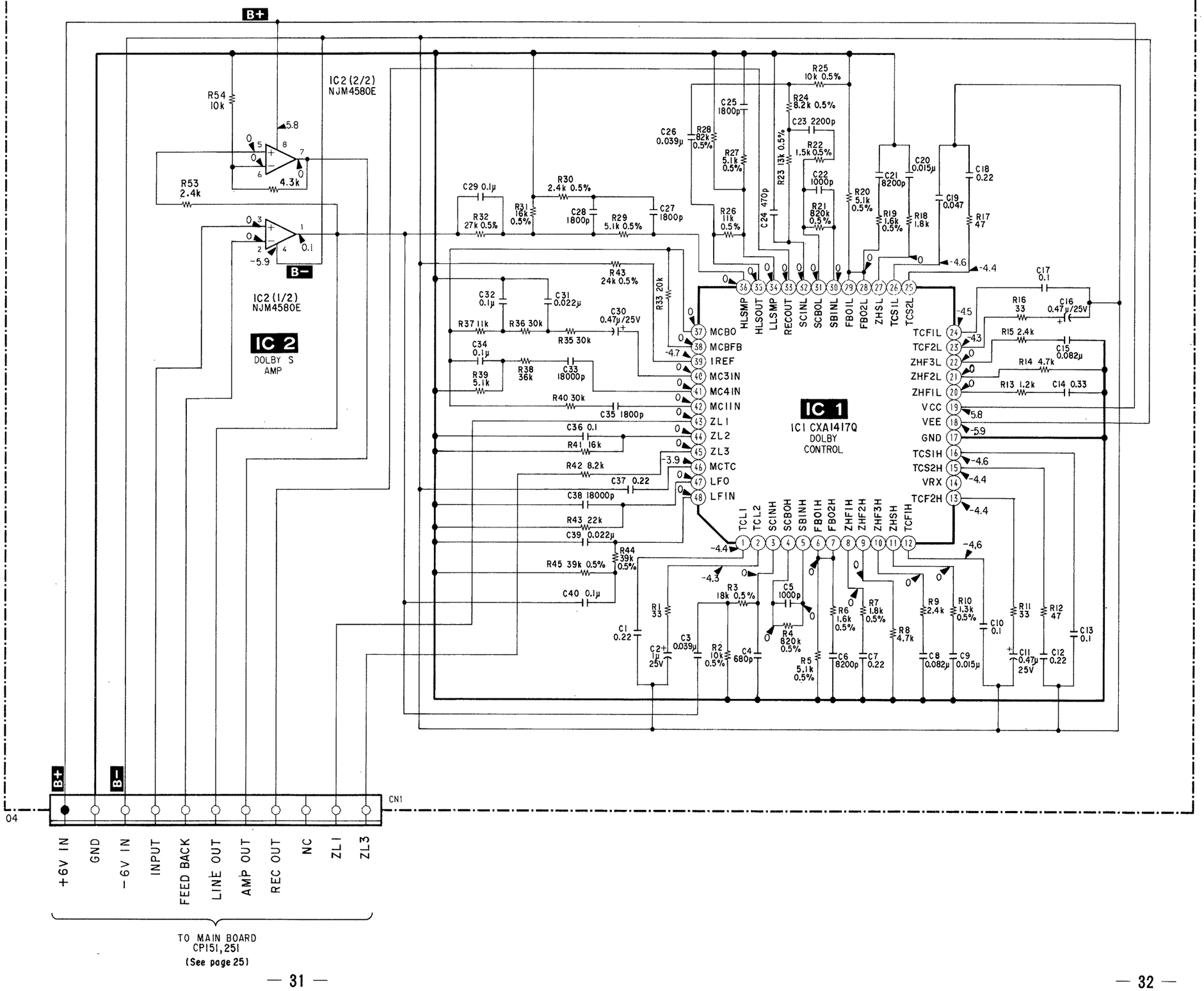
● Refer to page 16 for Note.



5-7. SCHEMATIC DIAGRAM (DOLBY (S) BOARD)

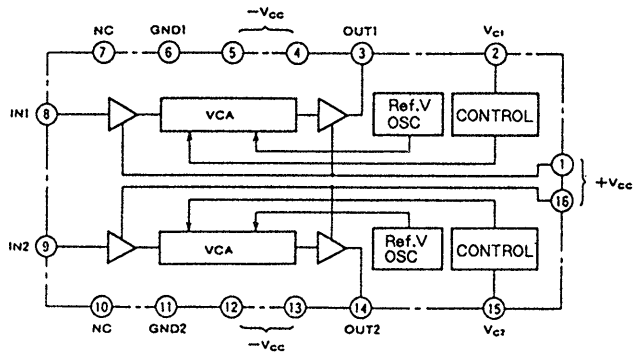
● Refer to page 21 for Note.

【DOLBY(S) BOARD】

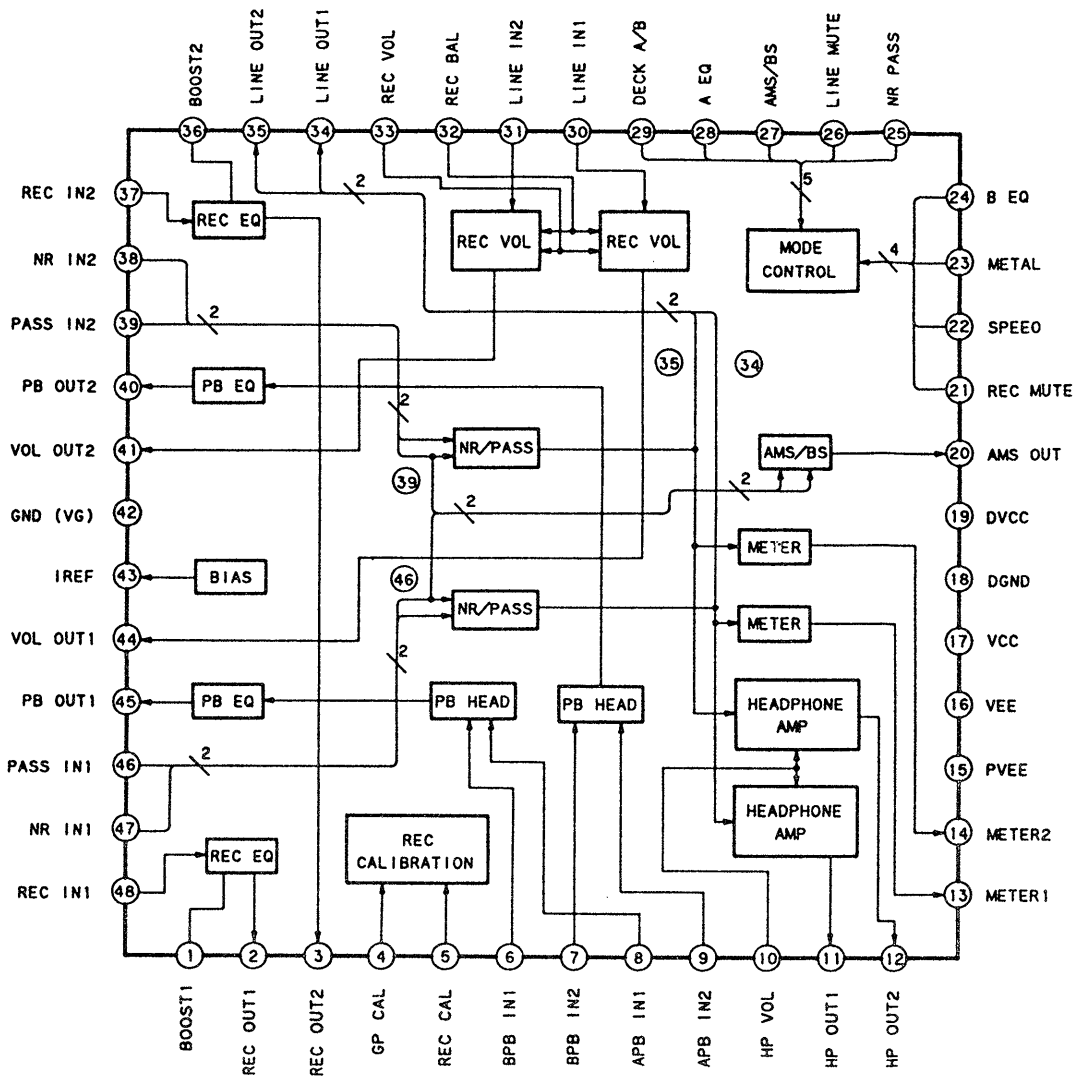


● IC BLOCK DIAGRAMS

IC505 M5283P



IC502 CXA1599Q



SECTION 6
EXPLODED VIEWS

NOTE :

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Color indication of Appearance Parts Example :
  KNOB, BALANCE (WHITE)....(RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark)list is given in the last of this parts list.

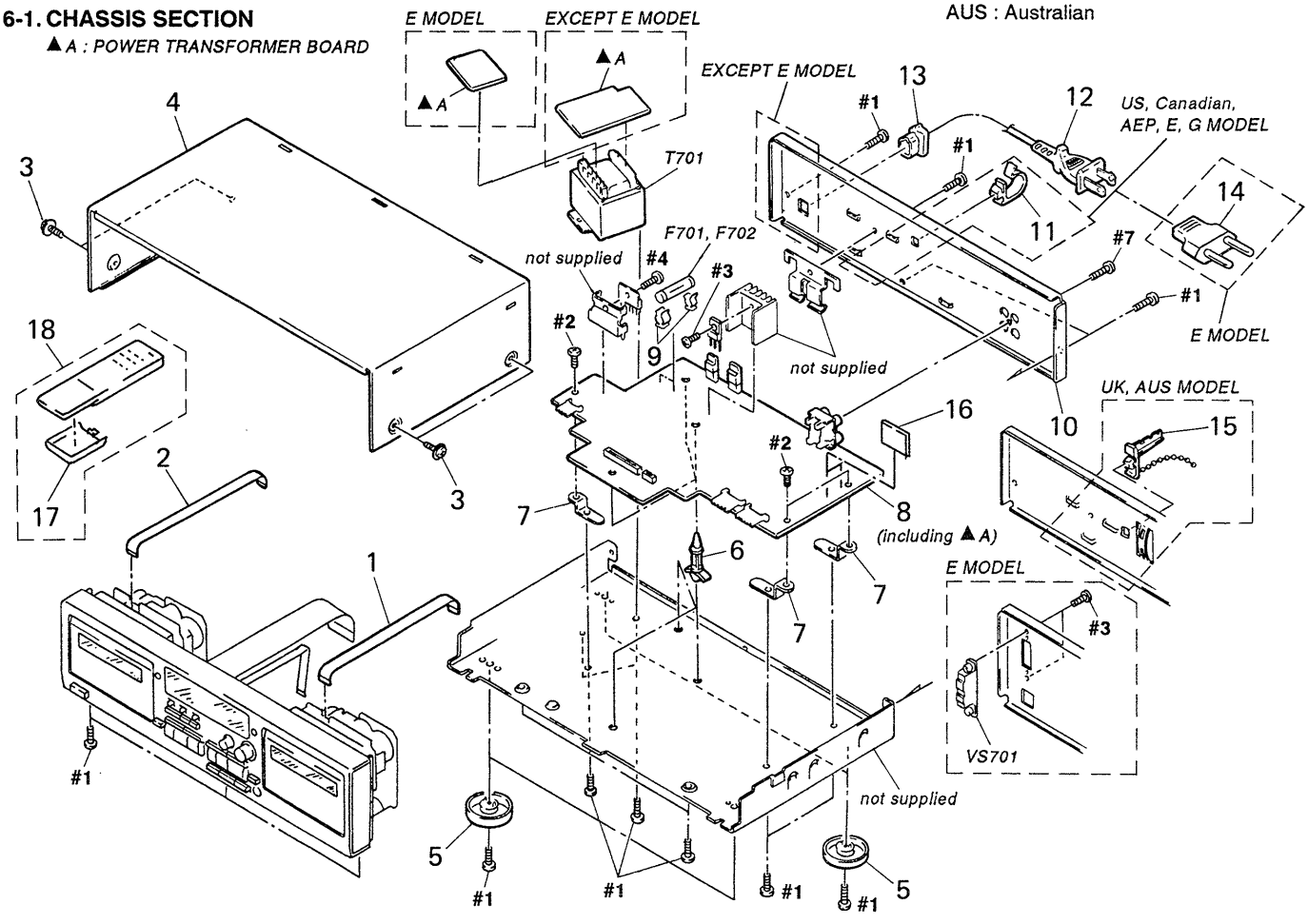
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

- G : Germany
  AUS : Australian

6-1. CHASSIS SECTION

▲A : POWER TRANSFORMER BOARD



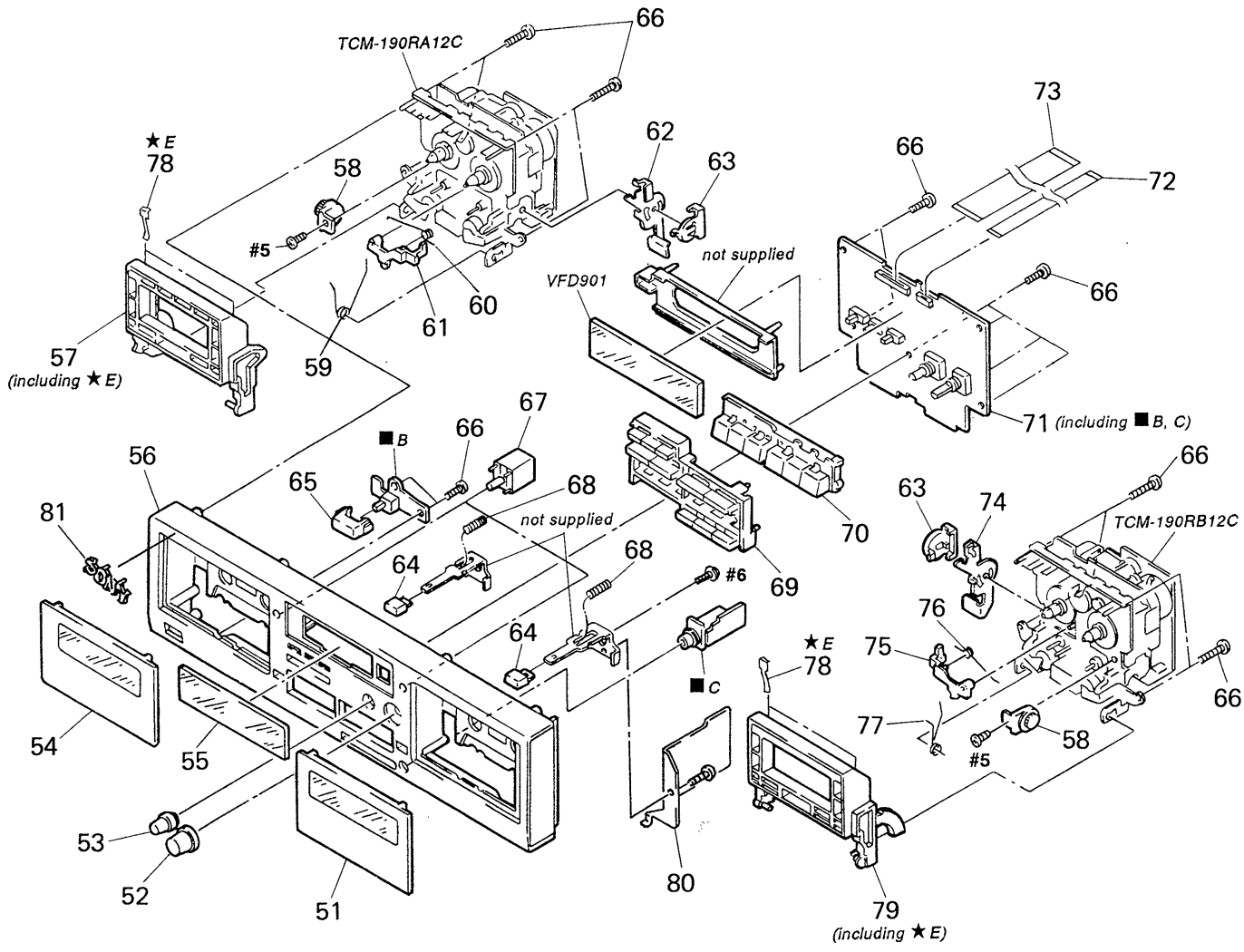
Ref. No.	Part No.	Description	Remark
1	1-690-906-11	WIRE (FLAT TYPE) (9 CORE)	
* 2	1-575-781-11	WIRE, FLAT TYPE (9 CORE)	
3	3-704-366-01	SCREW (CASE) (M3X8)	
4	3-332-578-61	CASE	
5	4-943-148-32	FOOT (F58175SW) (US, Canadian)	
5	4-943-148-42	FOOT (F58175SW) (AEP, UK, G, E, AUS)	
* 6	3-346-265-11	HOLDER, PC BOARD	
* 7	3-332-563-01	BRACKET (P)	
* 8	A-2007-019-A	MAIN BOARD, COMPLETE (US, Canadian, AEP)	
* 8	A-2007-021-A	MAIN BOARD, COMPLETE (UK, AUS)	
* 8	A-2007-022-A	MAIN BOARD, COMPLETE (E)	
* 8	A-2007-059-A	MAIN BOARD, COMPLETE (G)	
* 9	1-533-293-11	FUSE HOLDER	
* 10	3-385-970-41	PANEL, BACK (US, Canadian)	
* 10	3-385-970-51	PANEL, BACK (AEP, G)	
* 10	3-385-970-61	PANEL, BACK (UK, AUS)	
* 10	3-385-970-71	PANEL, BACK (E)	
* 11	4-949-235-01	HOOK (US, Canadian, AEP, G, E)	
⚠12	1-551-188-XX	CORD, POWER (E)	

Ref. No.	Part No.	Description	Remark
⚠12	1-558-945-21	CORD, POWER (POLAR. SPT-1) (US, Canadian)	
⚠12	1-575-651-21	CORD, POWER (AEP, G)	
⚠12	1-696-586-11	CORD, POWER (UK)	
⚠12	1-696-845-11	CORD, POWER (AUS)	
* 13	3-703-244-00	BUSHING (2104), CORD (AEP, UK, G, AUS)	
* 13	3-703-571-11	BUSHING (S) (4516), CORD (US, Canadian, E)	
⚠14	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
* 15	4-956-370-02	BAND, PLUG FIXED (AUS)	
* 16	A-2006-954-A	DOLBY(S) BOARD, COMPLATE	
17	2-181-754-01	COVER, BATTERY (Canadian)	
18	1-465-738-11	REMOTE COMMANDER (Canadian)	
⚠F701	1-532-285-00	FUSE (1.250A) (AEP, UK, G, E, AUS)	
⚠F701	1-576-103-11	FUSE (1.600A) (US, Canadian)	
⚠F702	1-532-285-00	FUSE (1.250A) (AEP, UK, G, E, AUS)	
⚠F702	1-576-103-11	FUSE (1.600A) (US, Canadian)	
⚠T701	1-450-837-41	TRANSFORMER, POWER (US, Canadian)	
⚠T701	1-450-838-41	TRANSFORMER, POWER (AEP, UK, G, AUS)	
⚠T701	1-450-839-11	TRANSFORMER, POWER (E)	
⚠VS701	1-692-155-11	SELECTOR, POWER VOLTAGE (VOLTAGE) (E)	

6-2. FRONT PANEL SECTION

■ *B : POWER SWITCH BOARD*

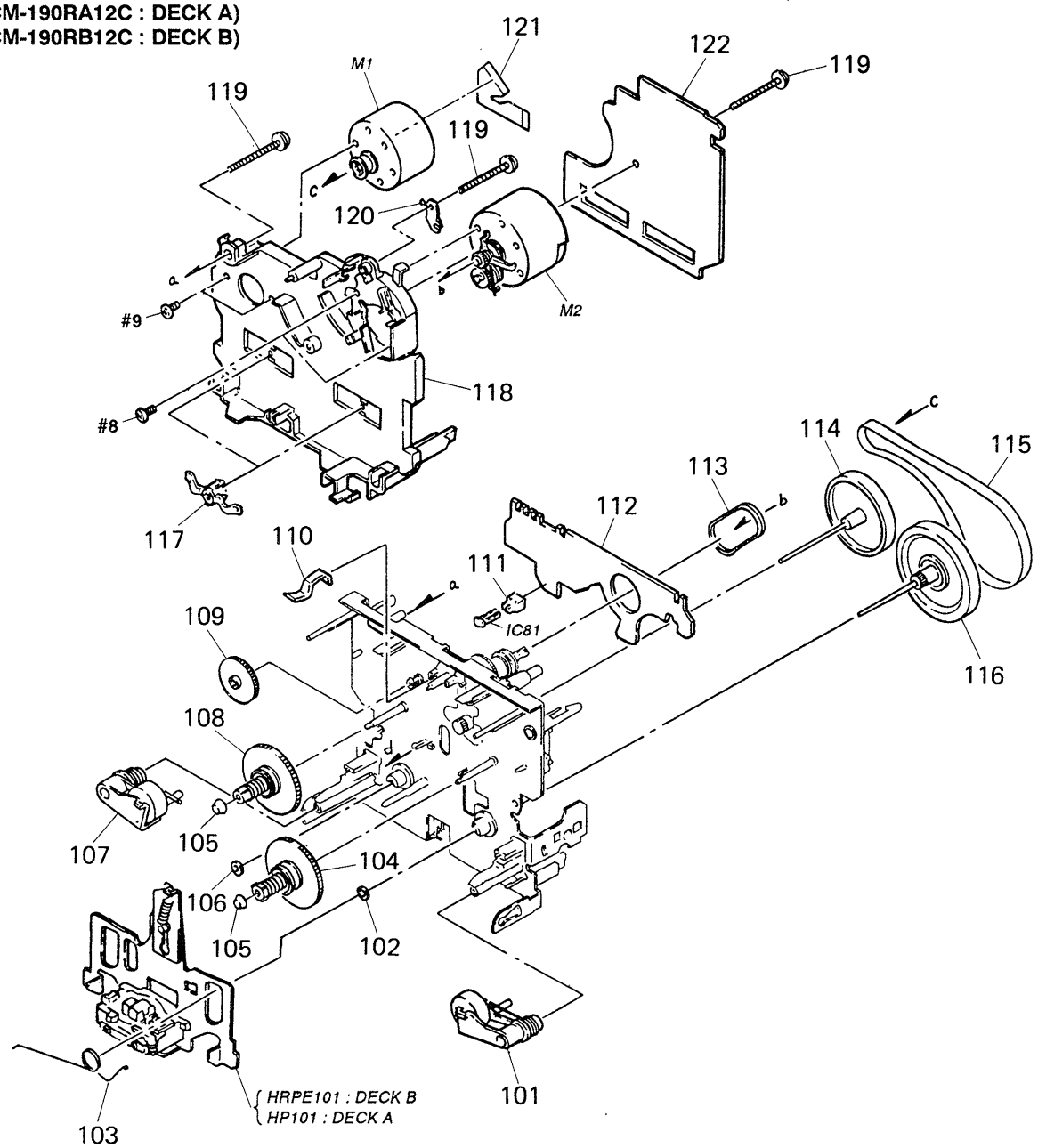
■ *C : HEADPHONE BOARD*



Ref. No.	Part No.	Description	Remark
51	X-3366-230-1	LID (B) ASSY, CASSETTE	
52	3-377-334-01	KNOB (REC)	
53	3-367-431-01	KNOB (BAL)	
54	X-3366-229-1	LID (A) ASSY, CASSETTE	
55	3-377-335-01	WINDOW (M) (US, AEP, UK, G, E, AUS)	
55	3-377-335-11	WINDOW (M) (Canadian)	
56	3-385-968-21	PANEL, FRONT (US, Canadian)	
56	3-385-968-31	PANEL, FRONT (AEP, UK, G, E, AUS)	
57	X-3340-195-1	HOLDER (R) ASSY, CASSETTE	
58	3-354-963-01	DAMPER	
59	3-354-960-01	SPRING (LOADING R), TORSION	
60	3-354-962-01	SPRING (EJ SAFTY SPRING R)	
61	3-354-956-01	LEVER (EJ SAFTY LEVER R)	
* 62	3-354-954-01	LEVER (LOCK LEVER R)	
63	3-354-957-01	JOINT (LOCK LEVER)	
64	3-377-328-01	BUTTON (EJECT)	
65	3-354-932-01	BUTTON (POWER)	

Ref. No.	Part No.	Description	Remark
66	4-951-620-01	SCREW (2.6X8), +BVTP	
67	3-377-329-11	BUTTON (COUNTER)	
68	3-382-382-01	SPRING, COMPRESSION	
69	3-377-342-11	BUTTON (WR)	
70	3-385-972-01	BUTTON (FR)	
* 71	A-2007-020-A	PANEL BOARD, COMPLETE	
72	1-690-911-11	WIRE (FLAT TYPE) (11 CORE)	
73	1-575-628-11	WIRE, FLAT TYPE (27 CORE)	
* 74	3-354-953-01	LEVER (LOCK LEVER L)	
75	3-354-955-01	LEVER (EJ SAFTY LEVER L)	
76	3-354-961-01	SPRING (EJ SAFTY SPRING L)	
77	3-354-959-01	SPRING (LOADING L), TORSION	
78	3-308-823-11	SPRING	
79	X-3340-194-1	HOLDER (L) ASSY, CASSETTE	
* 80	3-381-755-01	PLATE (HEAD LEAD), SHIELD	
81	4-925-334-11	EMBLEM (5-A), SONY	
VFD901	1-517-162-11	INDICATOR TUBE, FLUORESCENT	

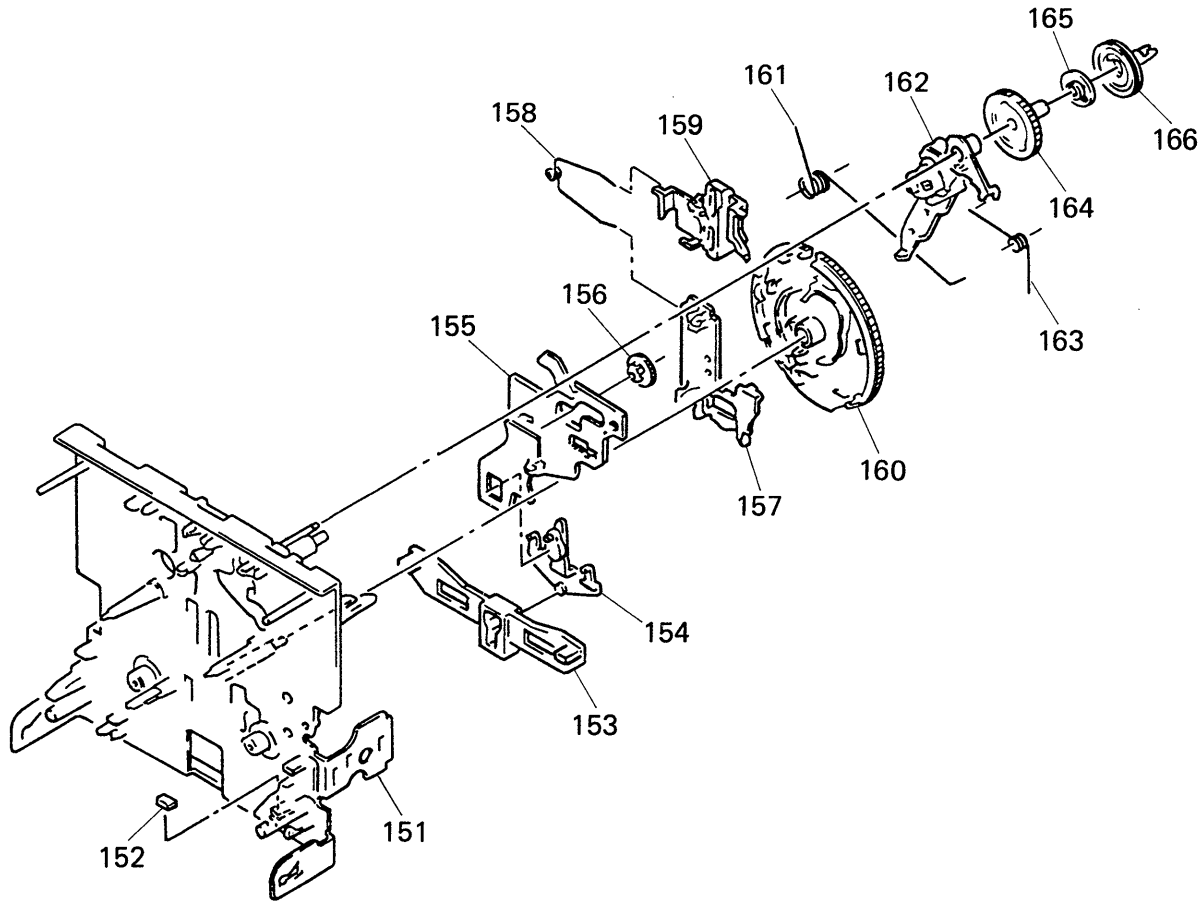
6-3. MECHANISM SECTION 1
(TCM-190RA12C : DECK A)
(TCM-190RB12C : DECK B)



Ref. No.	Part No.	Description	Remark
101	X-3359-408-1	LEVER (PINCH LEVER FWD) ASSY	
102	3-356-713-01	WASHER	
103	3-359-455-01	SPRING, TORSION	
104	X-3359-404-1	TABLE ASSY, REEL	
105	3-362-308-01	CAP (REEL)	
106	3-356-714-01	WASHER	
107	X-3359-409-1	LEVER (PINCH LEVER REV) ASSY	
108	X-3362-078-1	TABLE ASSY (B), REEL	
109	3-359-424-01	GEAR (REV GEAR)	
110	3-359-430-01	SPRING(CASSETTE RETAINER),LEAF	
111	3-343-419-01	HOLDER (S SENSER A)	
* 112	1-634-841-14	SW-A BOARD (DECK-A)	
* 112	1-634-841-14	SW-B BOARD (DECK-B)	
113	3-359-466-01	BELT (FR), SQUARE	
114	X-3359-410-1	FLYWHEEL (REV) ASSY	

Ref. No.	Part No.	Description	Remark
115	3-359-417-01	BELT (FLAT), CAPSTAN	
116	X-3359-406-1	FLYWHEEL (FWD) ASSY	
117	3-575-321-00	RETAINER, THRUST, CAPSTAN	
* 118	3-359-436-01	BASE (THRUST RETAINER),FITTING	
119	3-359-414-01	SCREW (+PTPWH 2X23)	
121	1-638-983-11	PC BOARD, MOTOR FLEXIBLE	
* 122	A-2006-399-A	AUDIO BOARD (RA12A), COMPLATE (DECK-A)	
* 122	A-2006-401-A	AUDIO BOARD (RB12A), COMPLATE (DECK-B)	
HP101	A-2003-837-F	BASE ASSY, HEAD (PLAYBACK)(DECK-A)	
HRPE101	A-2003-838-A	DECK ASSY, HEAD (PLAYBACK/RECORD/ERASE) (DECK-B)	
IC81	8-719-710-03	DIODE NJL5165K-B	
M1	X-3359-417-1	MOTOR(CAPSTAN) ASSY	
M2	X-3363-501-1	MOTOR ASSY, REEL	

6-4. MECHANISM SECTION 2
(TCM-190RA12C : DECK A)
(TCM-190RB12C : DECK B)



Ref. No.	Part No.	Description	Remark
151	X-3359-415-1	CHASSIS ASSY, MECHANICAL	
152	3-359-469-01	SPACER	
* 153	3-359-425-01	SLIDER (REVERSE SLIDER)	
154	3-359-426-01	LEVER (REVERSE LEVER)	
* 155	3-359-415-01	SLIDER (TRIGGER SLIDER)	
156	3-359-448-01	GEAR (TRIGGER)	
* 157	3-359-427-01	SLIDER (LEVERSE SLIDER)	
158	3-359-454-01	SPRING, TORSION	
159	3-359-429-01	SLIDER (BRAKE PLATE)	
160	3-359-420-01	GEAR (CAM GEAR)	
161	3-359-456-01	SPRING(TRIGGER SPRING), TORSION	
162	X-3359-405-1	LEVER (FR ARM) ASSY	
163	3-359-453-01	SPRING (FR ARM), TORSION	
164	3-359-419-01	GEAR (FR GEAR)	
165	3-359-421-01	CLUTCH (REEL DISK)	
166	3-359-418-01	PULLEY (FR PULLEY)	

SECTION 7
ELECTRICAL PARTS LIST

MAIN

NOTE :
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ , for example :
  uA.... : μ A.... , uPA.... : μ PA....
  uPB.... : μ PB.... , uPC.... : μ PC....
  uPD.... : μ PD....
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

- G : Germany
  AUS : Australian

Ref. No.	Part No.	Description			Remark
*	A-2007-019-A	MAIN BOARD, COMPLETE (US, Canadian, AEP)			
		**********			
*	A-2007-021-A	MAIN BOARD, COMPLETE (UK, AUS)			
		**********			
*	A-2007-022-A	MAIN BOARD, COMPLETE (E)			
		**********			
*	A-2007-059-A	MAIN BOARD, COMPLETE (G)			
		**********			
*	1-533-293-11	FUSE HOLDER			
*	1-690-880-31	LEAD (WITH CONNECTOR)			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3			
	7-685-871-01	SCREW +BVTT 3X6 (S)			
		< CAPACITOR >			
C101	1-162-294-31	CERAMIC	0.001uF	10%	50V
C102	1-130-476-00	MYLAR	0.0027uF	5%	50V
C103	1-124-907-11	ELECT	10uF	20%	50V
C105	1-130-475-00	MYLAR	0.0022uF	5%	50V
C106	1-130-475-00	MYLAR	0.0022uF	5%	50V
C107	1-136-174-00	FILM	0.56uF	5%	50V
C108	1-136-171-00	FILM	0.33uF	5%	50V
C109	1-124-907-11	ELECT	10uF	20%	50V
C110	1-124-925-11	ELECT	2.2uF	20%	100V
C111	1-124-907-11	ELECT	10uF	20%	50V
C112	1-164-159-11	CERAMIC	0.1uF		50V
C121	1-124-925-11	ELECT	2.2uF	20%	100V
C131	1-124-903-11	ELECT	1uF	20%	50V
C132	1-124-903-11	ELECT	1uF	20%	50V
C133	1-124-902-00	ELECT	0.47uF	20%	50V
C134	1-124-927-11	ELECT	4.7uF	20%	100V
C135	1-123-382-00	ELECT	3.3uF	20%	100V
C136	1-124-443-00	ELECT	100uF	20%	10V
C137	1-124-903-11	ELECT	1uF	20%	50V
C138	1-164-159-11	CERAMIC	0.1uF		50V
C139	1-162-283-31	CERAMIC	120PF	10%	50V
C151	1-124-925-11	ELECT	2.2uF	20%	100V

Ref. No.	Part No.	Description			Remark
C152	1-124-907-11	ELECT	10uF	20%	50V
C153	1-124-916-11	ELECT	22uF	20%	63V
C154	1-124-907-11	ELECT	10uF	20%	50V
C201	1-162-294-31	CERAMIC	0.001uF	10%	50V
C202	1-130-476-00	MYLAR	0.0027uF	5%	50V
C203	1-124-907-11	ELECT	10uF	20%	50V
C205	1-130-475-00	MYLAR	0.0022uF	5%	50V
C206	1-130-475-00	MYLAR	0.0022uF	5%	50V
C207	1-136-174-00	FILM	0.56uF	5%	50V
C208	1-136-171-00	FILM	0.33uF	5%	50V
C209	1-124-907-11	ELECT	10uF	20%	50V
C210	1-124-925-11	ELECT	2.2uF	20%	100V
C211	1-124-907-11	ELECT	10uF	20%	50V
C212	1-164-159-11	CERAMIC	0.1uF		50V
C221	1-124-925-11	ELECT	2.2uF	20%	100V
C231	1-124-903-11	ELECT	1uF	20%	50V
C232	1-124-903-11	ELECT	1uF	20%	50V
C233	1-124-902-00	ELECT	0.47uF	20%	50V
C234	1-124-927-11	ELECT	4.7uF	20%	100V
C235	1-123-382-00	ELECT	3.3uF	20%	100V
C236	1-124-443-00	ELECT	100uF	20%	10V
C237	1-124-903-11	ELECT	1uF	20%	50V
C238	1-164-159-11	CERAMIC	0.1uF		50V
C239	1-162-283-31	CERAMIC	120PF	10%	50V
C251	1-124-925-11	ELECT	2.2uF	20%	100V
C252	1-124-907-11	ELECT	10uF	20%	50V
C253	1-124-916-11	ELECT	22uF	20%	63V
C254	1-124-907-11	ELECT	10uF	20%	50V
C501	1-124-907-11	ELECT	10uF	20%	50V
C502	1-124-907-11	ELECT	10uF	20%	50V
C503	1-164-159-11	CERAMIC	0.1uF		50V
C521	1-124-471-00	ELECT	1000uF	20%	6.3V
C531	1-124-902-00	ELECT	0.47uF	20%	50V
C533	1-124-925-11	ELECT	2.2uF	20%	100V
C534	1-124-916-11	ELECT	22uF	20%	63V

Ref.No.	Part No.	Description			Remark
C535	1-124-902-00	ELECT	0.47uF	20%	50V
C536	1-124-443-00	ELECT	100uF	20%	10V
C537	1-124-443-00	ELECT	100uF	20%	10V
C538	1-124-443-00	ELECT	100uF	20%	10V
C553	1-124-927-11	ELECT	4.7uF	20%	100V
C554	1-124-927-11	ELECT	4.7uF	20%	100V
C561	1-130-476-00	MYLAR	0.0027uF	5%	50V
C562	1-136-164-00	FILM	0.082uF	5%	50V
C563	1-136-161-00	FILM	0.047uF	5%	50V
C564	1-130-475-00	MYLAR	0.0022uF	5%	50V
C701	1-124-927-11	ELECT	4.7uF	20%	100V
C702	1-124-898-11	ELECT	4700uF	20%	16V
C703	1-124-898-11	ELECT	4700uF	20%	16V
C704	1-124-927-11	ELECT	4.7uF	20%	100V
C705	1-124-472-11	ELECT	470uF	20%	10V
C706	1-124-927-11	ELECT	4.7uF	20%	100V
C707	1-124-762-00	ELECT	4700uF	20%	10V
C708	1-124-473-11	ELECT	1000uF	20%	10V
C709	1-124-910-11	ELECT	47uF	20%	50V
C710	1-124-907-11	ELECT	10uF	20%	50V
C711	1-124-927-11	ELECT	4.7uF	20%	100V
C712	1-136-169-00	FILM	0.22uF 5% 50V		<POWER TRANSFORMER BOARD>
C713	1-136-169-00	FILM	0.22uF 5% 50V G		<POWER TRANSFORMER BOARD>
C751	1-164-159-11	CERAMIC	0.1uF		50V <POWER TRANSFORMER BOARD>
C801	1-164-159-11	CERAMIC	0.1uF		50V
C802	1-124-902-00	ELECT	0.47uF	20%	50V
C803	1-164-159-11	CERAMIC	0.1uF		50V
C804	1-164-159-11	CERAMIC	0.1uF		50V
C805	1-162-288-31	CERAMIC	330PF	10%	50V
C806	1-164-159-11	CERAMIC	0.1uF		50V
C807	1-162-288-31	CERAMIC	330PF	10%	50V
C808	1-164-159-11	CERAMIC	0.1uF		50V
C809	1-124-907-11	ELECT	10uF	20%	50V
C810	1-124-902-00	ELECT	0.47uF	20%	50V
C811	1-124-360-00	ELECT	1000uF	20%	16V
C812	1-126-103-11	ELECT	470uF	20%	16V
C814	1-126-103-11	ELECT	470uF	20%	16V

< CONNECTOR >

* CN801	1-568-842-11	SOCKET, CONNECTOR 27P	
* CN802	1-568-830-11	SOCKET, CONNECTOR 11P	
* CN803	1-568-828-11	SOCKET, CONNECTOR 9P	
* CN804	1-568-828-11	SOCKET, CONNECTOR 9P	

< CONNECTOR >

CNP501	1-506-468-11	PIN, CONNECTOR 3P	
* CNP701	1-564-510-11	PLUG, CONNECTOR 7P	
* CNP702	1-568-954-11	PIN, CONNECTOR 5P	
* CNP703	1-580-230-31	PIN, CONNECTOR (PC BOARD) 2P	(US, Canadian, AEP, UK, G, AUS)
* CNP801	1-691-916-11	CONNECTOR, BOARD TO BOARD	
* CNP802	1-691-916-11	CONNECTOR, BOARD TO BOARD	
* CNP803	1-691-916-11	CONNECTOR, BOARD TO BOARD	

< DIODE >

D131	8-719-933-33	DIODE	HZS6A1L
D231	8-719-933-33	DIODE	HZS6A1L
D501	8-719-987-63	DIODE	1N4148M
D502	8-719-987-63	DIODE	1N4148M
D531	8-719-987-63	DIODE	1N4148M
D551	8-719-200-82	DIODE	11ES2
D552	8-719-200-82	DIODE	11ES2
D553	8-719-200-82	DIODE	11ES2
D554	8-719-200-82	DIODE	11ES2
D561	8-719-987-63	DIODE	1N4148M
D562	8-719-987-63	DIODE	1N4148M
D701	8-719-200-82	DIODE	11ES2
D702	8-719-200-82	DIODE	11ES2
D703	8-719-200-82	DIODE	11ES2
D704	8-719-200-82	DIODE	11ES2
D705	8-719-200-82	DIODE	11ES2
D706	8-719-200-82	DIODE	11ES2
D707	8-719-200-82	DIODE	11ES2
D708	8-719-987-63	DIODE	1N4148M
D709	8-719-000-78	DIODE	UZL-7L2
D709	8-719-933-44	DIODE	HZS7A2L
D710	8-719-933-33	DIODE	HZS6A1L
D711	8-719-933-33	DIODE	HZS6A1L
D712	8-719-987-63	DIODE	1N4148M
D713	8-719-987-63	DIODE	1N4148M
D714	8-719-000-78	DIODE	UZL-7L2
D714	8-719-933-44	DIODE	HZS7A2L
D715	8-719-933-33	DIODE	HZS6A1L
D716	8-719-987-63	DIODE	1N4148M
D801	8-719-987-63	DIODE	1N4148M
D802	8-719-987-63	DIODE	1N4148M

< IC >

IC151	8-759-140-53	IC	uPD4053BC
IC251	8-759-140-53	IC	uPD4053BC
IC501	8-752-059-54	IC	CXA1332S
IC502	8-752-058-57	IC	CXA1599Q
IC503	8-759-145-58	IC	uPC4558C
IC504	8-759-145-58	IC	uPC4558C

MAIN

Ref.No.	Part No.	Description	Remark
IC505	8-759-635-26	IC M5283P	
IC701	8-759-145-58	IC uPC4558C	
IC801	8-752-843-99	IC CXP82316-017Q	
IC802	8-759-165-82	IC PST600E-T	
IC803	8-759-207-05	IC TA7272P	
IC804	8-759-916-14	IC SN74HC04N	
IC805	8-759-000-48	IC MC14052BCP	
IC806	8-759-240-69	IC TC4069UBP	
		< JACK >	
J501	1-565-258-11	JACK, PIN 4P (LINE IN/OUT)	
		< COIL >	
* L801	1-420-872-00	COIL, AIR CORE	
* L802	1-420-872-00	COIL, AIR CORE	
L803	1-410-513-11	INDUCTOR 22uH	
		< FILTER >	
LPF101	1-231-388-00	FILTER, LOW PASS	
LPF201	1-231-388-00	FILTER, LOW PASS	
		< TRANSISTOR >	
Q101	8-729-900-74	TRANSISTOR DTC143TS	
Q121	8-729-922-37	TRANSISTOR 2SD2144S	
Q131	8-729-900-74	TRANSISTOR DTC143TS	
Q132	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q201	8-729-900-74	TRANSISTOR DTC143TS	
Q221	8-729-922-37	TRANSISTOR 2SD2144S	
Q231	8-729-900-74	TRANSISTOR DTC143TS	
Q232	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q501	8-729-900-65	TRANSISTOR DTA144ES	
Q502	8-729-900-65	TRANSISTOR DTA144ES	
Q503	8-729-900-65	TRANSISTOR DTA144ES	
Q504	8-729-900-65	TRANSISTOR DTA144ES	
Q505	8-729-900-65	TRANSISTOR DTA144ES	
Q521	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q531	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q532	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q535	8-729-900-89	TRANSISTOR DTC144ES	
Q561	8-729-900-89	TRANSISTOR DTC144ES	
Q562	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q701	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q702	8-729-209-15	TRANSISTOR 2SD2012	
Q703	8-729-900-74	TRANSISTOR DTC143TS	
Q704	8-729-900-74	TRANSISTOR DTC143TS	
Q705	8-729-141-83	TRANSISTOR 2SA473	
Q706	8-729-209-15	TRANSISTOR 2SD2012	
Q707	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q708	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q803	8-729-900-80	TRANSISTOR DTC114ES	
Q804	8-729-900-89	TRANSISTOR DTC144ES	
Q805	8-729-900-65	TRANSISTOR DTA144ES	
Q806	8-729-801-93	TRANSISTOR 2SD1387	
Q807	8-729-801-93	TRANSISTOR 2SD1387	
Q808	8-729-900-80	TRANSISTOR DTC114ES	
Q809	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q810	8-729-620-05	TRANSISTOR 2SC2603-EF	
		< RESISTOR >	
R101	1-249-432-11	CARBON 18K 5% 1/4W	
R102	1-247-838-00	CARBON 2K 5% 1/4W	
R103	1-249-421-11	CARBON 2.2K 5% 1/4W	
R104	1-249-441-11	CARBON 100K 5% 1/4W	
R105	1-247-848-11	CARBON 5.1K 5% 1/4W	
R106	1-249-421-11	CARBON 2.2K 5% 1/4W	
R108	1-247-864-11	CARBON 24K 5% 1/4W	
R109	1-249-414-11	CARBON 560 5% 1/4W	
R110	1-249-437-11	CARBON 47K 5% 1/4W	
R111	1-249-417-11	CARBON 1K 5% 1/4W	
R112	1-249-441-11	CARBON 100K 5% 1/4W	
R121	1-249-417-11	CARBON 1K 5% 1/4W	
R122	1-247-887-00	CARBON 220K 5% 1/4W	
R123	1-249-421-11	CARBON 2.2K 5% 1/4W	
R124	1-249-433-11	CARBON 22K 5% 1/4W	
R125	1-247-887-00	CARBON 220K 5% 1/4W	
R126	1-249-441-11	CARBON 100K 5% 1/4W	
R131	1-249-429-11	CARBON 10K 5% 1/4W	
R132	1-247-850-11	CARBON 6.2K 5% 1/4W	
R133	1-247-846-11	CARBON 4.3K 5% 1/4W	
R134	1-249-434-11	CARBON 27K 5% 1/4W	
R135	1-249-441-11	CARBON 100K 5% 1/4W	
R136	1-249-409-11	CARBON 220 5% 1/4W	
R137	1-249-421-11	CARBON 2.2K 5% 1/4W	
R138	1-249-439-11	CARBON 68K 5% 1/4W	
R139	1-249-437-11	CARBON 47K 5% 1/4W	
R140	1-249-417-11	CARBON 1K 5% 1/4W	
R152	1-249-436-11	CARBON 39K 5% 1/4W	
R153	1-247-858-11	CARBON 13K 5% 1/4W	
R154	1-249-436-11	CARBON 39K 5% 1/4W	
R155	1-247-858-11	CARBON 13K 5% 1/4W	
R156	1-249-429-11	CARBON 10K 5% 1/4W	
R157	1-249-433-11	CARBON 22K 5% 1/4W	
R158	1-249-437-11	CARBON 47K 5% 1/4W	
R201	1-249-432-11	CARBON 18K 5% 1/4W	
R202	1-247-838-00	CARBON 2K 5% 1/4W	
R203	1-249-421-11	CARBON 2.2K 5% 1/4W	
R204	1-249-441-11	CARBON 100K 5% 1/4W	

Ref. No.	Part No.	Description				Remark
R205	1-247-848-11	CARBON	5.1K	5%	1/4W	
R206	1-249-421-11	CARBON	2.2K	5%	1/4W	
R208	1-247-864-11	CARBON	24K	5%	1/4W	
R209	1-249-414-11	CARBON	560	5%	1/4W	
R210	1-249-437-11	CARBON	47K	5%	1/4W	
R211	1-249-417-11	CARBON	1K	5%	1/4W	
R212	1-249-441-11	CARBON	100K	5%	1/4W	
R221	1-249-417-11	CARBON	1K	5%	1/4W	
R222	1-247-887-00	CARBON	220K	5%	1/4W	
R223	1-249-421-11	CARBON	2.2K	5%	1/4W	
R224	1-249-433-11	CARBON	22K	5%	1/4W	
R225	1-247-887-00	CARBON	220K	5%	1/4W	
R226	1-249-441-11	CARBON	100K	5%	1/4W	
R231	1-249-429-11	CARBON	10K	5%	1/4W	
R232	1-247-850-11	CARBON	6.2K	5%	1/4W	
R233	1-247-846-11	CARBON	4.3K	5%	1/4W	
R234	1-249-434-11	CARBON	27K	5%	1/4W	
R235	1-249-441-11	CARBON	100K	5%	1/4W	
R236	1-249-409-11	CARBON	220	5%	1/4W	
R237	1-249-421-11	CARBON	2.2K	5%	1/4W	
R238	1-249-439-11	CARBON	68K	5%	1/4W	
R239	1-249-437-11	CARBON	47K	5%	1/4W	
R240	1-249-417-11	CARBON	1K	5%	1/4W	
R252	1-249-436-11	CARBON	39K	5%	1/4W	
R253	1-247-858-11	CARBON	13K	5%	1/4W	
R254	1-249-436-11	CARBON	39K	5%	1/4W	
R255	1-247-858-11	CARBON	13K	5%	1/4W	
R256	1-249-429-11	CARBON	10K	5%	1/4W	
R257	1-249-433-11	CARBON	22K	5%	1/4W	
R258	1-249-437-11	CARBON	47K	5%	1/4W	
R501	1-249-433-11	CARBON	22K	5%	1/4W	
R502	1-249-435-11	CARBON	33K	5%	1/4W	
R503	1-249-433-11	CARBON	22K	5%	1/4W	
R504	1-249-433-11	CARBON	22K	5%	1/4W	
R505	1-249-435-11	CARBON	33K	5%	1/4W	
R506	1-249-417-11	CARBON	1K	5%	1/4W	
R507	1-215-455-00	METAL	27K	1%	1/6W	
R508	1-249-435-11	CARBON	33K	5%	1/4W	
R509	1-249-417-11	CARBON	1K	5%	1/4W	
R521	1-249-437-11	CARBON	47K	5%	1/4W	
R522	1-249-429-11	CARBON	10K	5%	1/4W	
R523	1-249-437-11	CARBON	47K	5%	1/4W	
R531	1-249-429-11	CARBON	10K	5%	1/4W	
R532	1-249-429-11	CARBON	10K	5%	1/4W	
R533	1-249-417-11	CARBON	1K	5%	1/4W	
R534	1-247-872-11	CARBON	51K	5%	1/4W	
R535	1-249-429-11	CARBON	10K	5%	1/4W	
R536	1-249-413-11	CARBON	470	5%	1/4W	
⚠R537	1-212-863-00	FUSIBLE	18	5%	1/4W	F

Ref. No.	Part No.	Description				Remark
R538	1-249-417-11	CARBON	1K	5%	1/4W	
R539	1-249-432-11	CARBON	18K	5%	1/4W	
R540	1-249-430-11	CARBON	12K	5%	1/4W	
R541	1-249-437-11	CARBON	47K	5%	1/4W	
R544	1-249-433-11	CARBON	22K	5%	1/4W	
R545	1-215-455-00	METAL	27K	1%	1/6W	
R561	1-249-426-11	CARBON	5.6K	5%	1/4W	
R562	1-249-433-11	CARBON	22K	5%	1/4W	
R563	1-249-436-11	CARBON	39K	5%	1/4W	
R564	1-249-437-11	CARBON	47K	5%	1/4W	
R565	1-249-441-11	CARBON	100K	5%	1/4W	
R566	1-247-846-11	CARBON	4.3K	5%	1/4W	
R567	1-249-441-11	CARBON	100K	5%	1/4W	
R701	1-249-421-11	CARBON	2.2K	5%	1/4W	
R702	1-249-425-11	CARBON	4.7K	5%	1/4W	
R703	1-249-429-11	CARBON	10K	5%	1/4W	
R704	1-249-425-11	CARBON	4.7K	5%	1/4W	
R705	1-249-425-11	CARBON	4.7K	5%	1/4W	
R706	1-249-427-11	CARBON	6.8K	5%	1/4W	
R707	1-249-419-11	CARBON	1.5K	5%	1/4W	
R708	1-249-429-11	CARBON	10K	5%	1/4W	
R709	1-249-419-11	CARBON	1.5K	5%	1/4W	
R710	1-249-425-11	CARBON	4.7K	5%	1/4W	
R711	1-249-427-11	CARBON	6.8K	5%	1/4W	
R712	1-249-427-11	CARBON	6.8K	5%	1/4W	
R713	1-249-417-11	CARBON	1K	5%	1/4W	
R714	1-247-842-11	CARBON	3K	5%	1/4W	
R715	1-249-429-11	CARBON	10K	5%	1/4W	
R716	1-249-430-11	CARBON	12K	5%	1/4W	
R717	1-249-437-11	CARBON	47K	5%	1/4W	
⚠R718	1-219-137-11	FUSIBLE	0.33	10%	1/4W	F
R719	1-249-414-11	CARBON	560	5%	1/4W	
R801	1-249-417-11	CARBON	1K	5%	1/4W	
R802	1-249-441-11	CARBON	100K	5%	1/4W	
R805	1-249-435-11	CARBON	33K	5%	1/4W	
R806	1-249-429-11	CARBON	10K	5%	1/4W	
R807	1-249-430-11	CARBON	12K	5%	1/4W	
R808	1-247-852-11	CARBON	7.5K	5%	1/4W	
R809	1-249-430-11	CARBON	12K	5%	1/4W	
R810	1-249-422-11	CARBON	2.7K	5%	1/4W	
R811	1-249-426-11	CARBON	5.6K	5%	1/4W	
R812	1-247-852-11	CARBON	7.5K	5%	1/4W	
R813	1-247-858-11	CARBON	13K	5%	1/4W	
R816	1-249-433-11	CARBON	22K	5%	1/4W	
R817	1-249-433-11	CARBON	22K	5%	1/4W	
R818	1-249-433-11	CARBON	22K	5%	1/4W	
R819	1-249-429-11	CARBON	10K	5%	1/4W	
R820	1-249-433-11	CARBON	22K	5%	1/4W	
R821	1-249-429-11	CARBON	10K	5%	1/4W	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MAIN DOLBY(S)

Ref.No.	Part No.	Description				Remark
R822	1-249-430-11	CARBON	12K	5%	1/4W	
R823	1-249-433-11	CARBON	22K	5%	1/4W	
R824	1-249-433-11	CARBON	22K	5%	1/4W	
R825	1-249-433-11	CARBON	22K	5%	1/4W	
R826	1-249-405-11	CARBON	100	5%	1/4W	
R827	1-249-430-11	CARBON	12K	5%	1/4W	
R828	1-249-433-11	CARBON	22K	5%	1/4W	
R829	1-249-433-11	CARBON	22K	5%	1/4W	
R830	1-249-433-11	CARBON	22K	5%	1/4W	
R831	1-249-405-11	CARBON	100	5%	1/4W	
R832	1-249-434-11	CARBON	27K	5%	1/4W	
R833	1-249-434-11	CARBON	27K	5%	1/4W	
R834	1-249-434-11	CARBON	27K	5%	1/4W	
R835	1-249-434-11	CARBON	27K	5%	1/4W	
R836	1-249-429-11	CARBON	10K	5%	1/4W	
R837	1-249-429-11	CARBON	10K	5%	1/4W	
R838	1-249-429-11	CARBON	10K	5%	1/4W	
R839	1-249-429-11	CARBON	10K	5%	1/4W	
R840	1-249-421-11	CARBON	2.2K	5%	1/4W	
R841	1-247-874-11	CARBON	62K	5%	1/4W	
R842	1-247-866-11	CARBON	30K	5%	1/4W	
R843	1-249-431-11	CARBON	15K	5%	1/4W	
R844	1-247-852-11	CARBON	7.5K	5%	1/4W	
R847	1-249-432-11	CARBON	18K	5%	1/4W	
R848	1-247-848-11	CARBON	5.1K	5%	1/4W	
R849	1-249-421-11	CARBON	2.2K	5%	1/4W	
R850	1-249-429-11	CARBON	10K	5%	1/4W	
R851	1-249-421-11	CARBON	2.2K	5%	1/4W	
R852	1-249-429-11	CARBON	10K	5%	1/4W	
R853	1-249-422-11	CARBON	2.7K	5%	1/4W	
R854	1-249-422-11	CARBON	2.7K	5%	1/4W	
R855	1-249-422-11	CARBON	2.7K	5%	1/4W	
R856	1-249-421-11	CARBON	2.2K	5%	1/4W	
R857	1-249-421-11	CARBON	2.2K	5%	1/4W	
R858	1-249-421-11	CARBON	2.2K	5%	1/4W	
R859	1-249-421-11	CARBON	2.2K	5%	1/4W	
R860	1-249-421-11	CARBON	2.2K	5%	1/4W	
R861	1-249-434-11	CARBON	27K	5%	1/4W	
R862	1-249-434-11	CARBON	27K	5%	1/4W	
R863	1-249-405-11	CARBON	100	5%	1/4W	
R864	1-249-405-11	CARBON	100	5%	1/4W	
R865	1-249-405-11	CARBON	100	5%	1/4W	
R866	1-249-405-11	CARBON	100	5%	1/4W	
R867	1-247-840-00	CARBON	2.4K	5%	1/4W	
R868	1-249-425-11	CARBON	4.7K	5%	1/4W	
R870	1-247-887-00	CARBON	220K	5%	1/4W	
R871	1-247-887-00	CARBON	220K	5%	1/4W	

Ref.No.	Part No.	Description			Remark
		< VARIABLE RESISTOR >			
RV131	1-241-630-11	RES, ADJ, CARBON 10K (REC LEVEL L)			
RV231	1-241-630-11	RES, ADJ, CARBON 10K (REC LEVEL R)			
		< TEST PIN >			
* TP501	1-564-506-11	PLUG, CONNECTOR 3P			
* TP801	1-564-505-11	PLUG, CONNECTOR 2P			
		< CRYSTAL >			
X801	1-577-377-11	VIBRATOR, CERAMIC (10MHz)			
**********					
*	A-2006-954-A	DOLBY(S) BOARD, COMPLATE			
		**********			
		< CAPACITOR >			
C1	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C2	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C3	1-104-558-91	FILM CHIP	0.039uF	5%	16V
C4	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C5	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C6	1-164-717-11	CERAMIC CHIP	0.0082uF	5%	50V
C7	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C8	1-104-562-11	FILM CHIP	0.082uF	5%	16V
C9	1-104-553-11	FILM CHIP	0.015uF	5%	16V
C10	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C11	1-135-145-11	TANTALUM CHIP	0.47uF	10%	35V
C12	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C13	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C14	1-162-568-11	CERAMIC CHIP	0.33uF	10%	16V
C15	1-104-562-11	FILM CHIP	0.082uF	5%	16V
C16	1-135-145-11	TANTALUM CHIP	0.47uF	10%	35V
C17	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C18	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C19	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C20	1-104-553-11	FILM CHIP	0.015uF	5%	16V
C21	1-164-717-11	CERAMIC CHIP	0.0082uF	5%	50V
C22	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C23	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C24	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C25	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C26	1-104-558-91	FILM CHIP	0.039uF	5%	16V
C27	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C28	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C29	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C30	1-135-145-11	TANTALUM CHIP	0.47uF	10%	35V
C31	1-104-555-11	FILM CHIP	0.022uF	5%	16V
C32	1-104-563-11	FILM CHIP	0.1uF	5%	16V

Ref.No.	Part No.	Description			Remark
C33	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C34	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C35	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C36	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C37	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C38	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C39	1-104-555-11	FILM CHIP	0.022uF	5%	16V
C40	1-104-563-11	FILM CHIP	0.1uF	5%	16V
		< CONNECTOR >			
* CN1	1-537-473-11	TERMINAL (LEAD PIN)			
		< IC >			
IC1	8-752-056-51	IC CXA1417Q			
IC2	8-759-711-85	IC NJM4580E-D			
		< RESISTOR >			
R1	1-216-013-00	METAL CHIP	33	5%	1/10W
R2	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R3	1-216-681-11	METAL CHIP	18K	0.5%	1/10W
R4	1-218-774-11	METAL CHIP	820K	0.50%	1/10W
R5	1-216-668-11	METAL CHIP	5.1K	0.5%	1/10W
R6	1-216-656-11	METAL CHIP	1.6K	0.5%	1/10W
R7	1-216-657-11	METAL CHIP	1.8K	0.5%	1/10W
R8	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R9	1-216-058-00	METAL GLAZE	2.4K	5%	1/10W
R10	1-216-654-11	METAL CHIP	1.3K	0.5%	1/10W
R11	1-216-013-00	METAL CHIP	33	5%	1/10W
R12	1-216-017-00	METAL CHIP	47	5%	1/10W
R13	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R14	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R15	1-216-058-00	METAL GLAZE	2.4K	5%	1/10W
R16	1-216-013-00	METAL CHIP	33	5%	1/10W
R17	1-216-017-00	METAL CHIP	47	5%	1/10W
R18	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R19	1-216-656-11	METAL CHIP	1.6K	0.5%	1/10W
R20	1-216-668-11	METAL CHIP	5.1K	0.5%	1/10W
R21	1-218-774-11	METAL CHIP	820K	0.50%	1/10W
R22	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R23	1-216-678-11	METAL CHIP	13K	0.5%	1/10W
R24	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R25	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R26	1-216-676-11	METAL CHIP	11K	0.5%	1/10W
R27	1-216-668-11	METAL CHIP	5.1K	0.5%	1/10W
R28	1-216-697-11	METAL CHIP	82K	0.5%	1/10W
R29	1-216-668-11	METAL CHIP	5.1K	0.5%	1/10W
R30	1-216-660-11	METAL CHIP	2.4K	0.5%	1/10W
R31	1-216-680-11	METAL CHIP	16K	0.5%	1/10W

Ref.No.	Part No.	Description			Remark
R32	1-216-685-11	METAL CHIP	27K	0.5%	1/10W
R33	1-216-080-00	METAL CHIP	20K	5%	1/10W
R34	1-216-684-11	METAL CHIP	24K	0.5%	1/10W
R35	1-216-084-00	METAL CHIP	30K	5%	1/10W
R36	1-216-084-00	METAL CHIP	30K	5%	1/10W
R37	1-216-074-00	METAL CHIP	11K	5%	1/10W
R38	1-216-086-00	METAL GLAZE	36K	5%	1/10W
R39	1-216-066-00	METAL CHIP	5.1K	5%	1/10W
R40	1-216-084-00	METAL CHIP	30K	5%	1/10W
R41	1-216-078-00	METAL GLAZE	16K	5%	1/10W
R42	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R43	1-216-081-00	METAL CHIP	22K	5%	1/10W
R44	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R45	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R53	1-216-058-00	METAL GLAZE	2.4K	5%	1/10W
R54	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R55	1-216-666-11	METAL CHIP	4.3K	0.5%	1/10W
**********					
*	1-634-841-14	SW-A BOARD (DECK A)			
		**********			
	3-343-419-01	HOLDER (S SENSER A)			
		< CONNECTOR >			
* CNP81	1-568-852-11	SOCKET, CONNECTOR 9P			
		< IC >			
IC81	8-719-710-03	DIODE NJL5165K-B			
		< RESISTOR >			
R84	1-249-417-11	CARBON	1K	5%	1/4W
R85	1-249-408-11	CARBON	180	5%	1/4W
		< SWITCH >			
S81	1-571-958-11	SWITCH, PUSH (STOP SW)			
S82	1-571-281-21	SWITCH, LEAF (CrO_2)			
S86	1-571-281-21	SWITCH, LEAF (HALF)			
**********					
*	A-2006-399-A	AUDIO BOARD (RA12A), COMPLATE (DECK A)			
		**********			
		< CAPACITOR >			
C11	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C12	1-136-157-00	FILM	0.022uF	5%	50V
C13	1-124-234-00	ELECT	22uF	20%	16V
C18	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C21	1-163-131-00	CERAMIC CHIP	390PF	5%	50V

AUDIO(DECK-A) SW-B AUDIO(DECK-B)

Ref.No.	Part No.	Description			Remark
C22	1-136-157-00	FILM	0.022uF	5%	50V
C23	1-124-234-00	ELECT	22uF	20%	16V
C28	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C31	1-124-234-00	ELECT	22uF	20%	16V
C32	1-124-234-00	ELECT	22uF	20%	16V
C72	1-124-499-11	ELECT, NONPOLAR	1uF	20%	50V
		< CONNECTOR >			
* CNP31	1-580-782-11	CONNECTOR, BOARD TO BOARD			
* CNP32	1-580-772-11	PIN, CONNECTOR (PC BOARD) 4P			
* CNP71	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P			
* CNP72	1-580-411-11	SOCKET, CONNECTOR 4P			
		< IC >			
IC31	8-759-106-02	IC uPC4570G2			
		< JUMPER RESISTOR >			
JW1	1-216-295-00	METAL CHIP	0	5%	1/10W
JW51	1-216-296-00	METAL CHIP	0	5%	1/8W
JW52	1-216-296-00	METAL CHIP	0	5%	1/8W
JW53	1-216-296-00	METAL CHIP	0	5%	1/8W
JW54	1-216-296-00	METAL CHIP	0	5%	1/8W
		< TRANSISTOR >			
Q71	8-729-602-36	TRANSISTOR 2SA1602			
		< RESISTOR >			
R11	1-216-099-00	METAL CHIP	120K	5%	1/10W
R12	1-216-025-00	METAL CHIP	100	5%	1/10W
R13	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R14	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R21	1-216-099-00	METAL CHIP	120K	5%	1/10W
R22	1-216-025-00	METAL CHIP	100	5%	1/10W
R23	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R24	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R31	1-216-033-00	METAL CHIP	220	5%	1/10W
R32	1-216-033-00	METAL CHIP	220	5%	1/10W
R71	1-216-082-00	METAL GLAZE	24K	5%	1/10W
R72	1-216-081-00	METAL CHIP	22K	5%	1/10W
R73	1-216-089-00	METAL CHIP	47K	5%	1/10W
R74	1-216-089-00	METAL CHIP	47K	5%	1/10W
		< VARIABLE RESISTOR >			
RV11	1-241-627-11	RES, ADJ, CARBON 1K (PB LEVEL L)			
RV21	1-241-627-11	RES, ADJ, CARBON 1K (PB LEVEL R)			
RV71	1-241-630-11	RES, ADJ, CARBON 10K (NORMAL SPEED)			
RV72	1-241-630-11	RES, ADJ, CARBON 10K (HIGH SPEED)			

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Ref.No.	Part No.	Description			Remark
*	1-634-841-14	SW-B BOARD (DECK B)			
		**********			
	3-343-419-01	HOLDER (S SENSER A)			
		< CONNECTOR >			
* CNP81	1-568-852-11	SOCKET, CONNECTOR 9P			
		< IC >			
IC81	8-719-710-03	DIODE NJL5165K-B			
		< RESISTOR >			
R81	1-249-414-11	CARBON	560	5%	1/4W
R82	1-247-818-11	CARBON	300	5%	1/4W
R83	1-247-834-11	CARBON	1.3K	5%	1/4W
R84	1-249-417-11	CARBON	1K	5%	1/4W
R85	1-249-408-11	CARBON	180	5%	1/4W
		< SWITCH >			
S81	1-571-958-11	SWITCH, PUSH (STOP SW)			
S82	1-571-281-21	SWITCH, LEAF (CRO2)			
S83	1-571-281-21	SWITCH, LEAF (METAL)			
S84	1-571-281-21	SWITCH, LEAF (REC A)			
S85	1-571-281-21	SWITCH, LEAF (REC B)			
S86	1-571-281-21	SWITCH, LEAF (HALF)			

****

Ref.No.	Part No.	Description			Remark
*	A-2006-401-A	AUDIO BOARD (RB12A), COMPLATE (DECK B)			
		**********			
		< CAPACITOR >			
C11	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C12	1-136-157-00	FILM	0.022uF	5%	50V
C13	1-124-234-00	ELECT	22uF	20%	16V
C18	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C21	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C22	1-136-157-00	FILM	0.022uF	5%	50V
C23	1-124-234-00	ELECT	22uF	20%	16V
C28	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C31	1-124-234-00	ELECT	22uF	20%	16V
C32	1-124-234-00	ELECT	22uF	20%	16V
C33	1-124-234-00	ELECT	22uF	20%	16V
C51	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C52	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C53	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C54	1-136-601-11	FILM	0.01uF	5%	630V
C56	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C57	1-164-346-11	CERAMIC CHIP	1uF		16V
C71	1-164-346-11	CERAMIC CHIP	1uF		16V

Ref. No.	Part No.	Description			Remark
C80	1-124-234-00	ELECT	22uF	20%	16V
C81	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C82	1-136-157-00	FILM	0.022uF	5%	50V
C83	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C84	1-136-478-11	FILM	470PF	5%	630V
C85	1-136-433-11	FILM	100PF	5%	630V
C86	1-163-143-00	CERAMIC CHIP	0.0012uF	5%	50V
C87	1-136-273-91	FILM	75PF	5%	630V
C88	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C89	1-124-234-00	ELECT	22uF	20%	16V
C90	1-107-045-00	MICA	3.9PF		500V
C91	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C92	1-136-157-00	FILM	0.022uF	5%	50V
C93	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C94	1-136-478-11	FILM	470PF	5%	630V
C95	1-136-433-11	FILM	100PF	5%	630V
C96	1-163-143-00	CERAMIC CHIP	0.0012uF	5%	50V
C97	1-136-273-91	FILM	75PF	5%	630V
C98	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C99	1-164-005-11	CERAMIC CHIP	0.47uF		25V
		< CONNECTOR >			
* CNP31	1-580-782-11	CONNECTOR, BOARD TO BOARD			
* CNP32	1-580-781-11	PIN, CONNECTOR (PC BOARD) 7P			
* CNP33	1-580-782-11	CONNECTOR, BOARD TO BOARD			
* CNP71	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P			
* CNP72	1-580-411-11	SOCKET, CONNECTOR 4P			
		< DIODE >			
D31	8-719-016-74	DIODE 1SS352			
		< IC >			
IC31	8-759-106-02	IC uPC4570G2			
IC81	8-759-106-56	IC uPC1297CA			
		< COIL >			
L81	1-410-780-11	INDUCTOR	27mH		
L91	1-410-780-11	INDUCTOR	27mH		
		< TRANSISTOR >			
Q51	8-729-808-01	TRANSISTOR	2SD1622-S		
Q52	8-729-808-01	TRANSISTOR	2SD1622-S		
Q53	8-729-808-01	TRANSISTOR	2SD1622-S		
Q71	8-729-216-22	TRANSISTOR	2SA1162		
		< RESISTOR >			
R11	1-216-099-00	METAL CHIP	120K	5%	1/10W
R12	1-216-025-00	METAL CHIP	100	5%	1/10W
R13	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R14	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R21	1-216-099-00	METAL CHIP	120K	5%	1/10W
R22	1-216-025-00	METAL CHIP	100	5%	1/10W
R23	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R24	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R31	1-216-033-00	METAL CHIP	220	5%	1/10W
R32	1-216-033-00	METAL CHIP	220	5%	1/10W
R51	1-216-097-00	METAL CHIP	100K	5%	1/10W
R52	1-216-097-00	METAL CHIP	100K	5%	1/10W
R53	1-216-073-00	METAL CHIP	10K	5%	1/10W
R54	1-216-309-00	METAL CHIP	5.6	5%	1/10W
R55	1-216-309-00	METAL CHIP	5.6	5%	1/10W
R57	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R71	1-216-082-00	METAL GLAZE	24K	5%	1/10W
R72	1-216-081-00	METAL CHIP	22K	5%	1/10W
R73	1-216-089-00	METAL CHIP	47K	5%	1/10W
R74	1-216-089-00	METAL CHIP	47K	5%	1/10W
R81	1-216-073-00	METAL CHIP	10K	5%	1/10W
R82	1-216-085-00	METAL CHIP	33K	5%	1/10W
R83	1-216-001-00	METAL CHIP	10	5%	1/10W
R84	1-216-101-00	METAL CHIP	150K	5%	1/10W
R85	1-216-075-00	METAL CHIP	12K	5%	1/10W
R91	1-216-073-00	METAL CHIP	10K	5%	1/10W
R92	1-216-085-00	METAL CHIP	33K	5%	1/10W
R93	1-216-001-00	METAL CHIP	10	5%	1/10W
R94	1-216-101-00	METAL CHIP	150K	5%	1/10W
R95	1-216-075-00	METAL CHIP	12K	5%	1/10W
		< VARIABLE RESISTOR >			
RV11	1-241-627-11	RES, ADJ, CARBON 1K (PB LEVEL L)			
RV21	1-241-627-11	RES, ADJ, CARBON 1K (PB LEVEL R)			
RV71	1-241-630-11	RES, ADJ, CARBON 10K (NORMAL SPEED)			
RV72	1-241-630-11	RES, ADJ, CARBON 10K (HIGH SPEED)			
RV81	1-241-122-11	RES, ADJ, CARBON 22K (RECORD BIAS L)			
RV91	1-241-122-11	RES, ADJ, CARBON 22K (RECORD BIAS R)			
		< RELAY >			
RY31	1-515-913-11	RELAY			
		< TRANSFORMER >			
T51	1-406-417-11	COIL, BIAS OSCILLATION			
T81	1-433-381-11	TRANSFORMER, BIAS OSCILLATOR			
T91	1-433-381-11	TRANSFORMER, BIAS OSCILLATOR			
		< TEST PIN >			
* TP81	1-568-449-11	HOUSING, CONNECTOR(PC BOARD)3P			

****

PANEL

Ref. No.	Part No.	Description				Remark
*	A-2007-020-A	PANEL BOARD, COMPLETE				
		**********				
	1-690-880-81	LEAD (WITH CONNECTOR)				
		< CAPACITOR >				
C551	1-161-494-00	CERAMIC	0.022uF		25V	<HEADPHONE BOARD>
C901	1-164-159-11	CERAMIC	0.1uF		50V	
C902	1-164-159-11	CERAMIC	0.1uF		50V	
C903	1-164-159-11	CERAMIC	0.1uF		50V	
C904	1-164-159-11	CERAMIC	0.1uF		50V	
		< CONNECTOR >				
* CN901	1-568-869-11	SOCKET, CONNECTOR 27P				
* CN902	1-568-854-11	SOCKET, CONNECTOR 11P				
		< IC >				
IC901	8-741-100-48	IC SBX1610-59				
		< JACK >				
J502	1-507-796-71	JACK (HEADPHONES)				<HEADPHONE BOARD>
		< RESISTOR >				
R191	1-247-864-11	CARBON	24K	5%	1/4W	
R291	1-247-864-11	CARBON	24K	5%	1/4W	
R901	1-249-429-11	CARBON	10K	5%	1/4W	
R902	1-249-429-11	CARBON	10K	5%	1/4W	
R903	1-249-429-11	CARBON	10K	5%	1/4W	
R904	1-249-429-11	CARBON	10K	5%	1/4W	
R905	1-249-418-11	CARBON	1.2K	5%	1/4W	
R906	1-249-420-11	CARBON	1.8K	5%	1/4W	
R907	1-249-422-11	CARBON	2.7K	5%	1/4W	
R908	1-249-424-11	CARBON	3.9K	5%	1/4W	
R909	1-249-427-11	CARBON	6.8K	5%	1/4W	
R910	1-249-418-11	CARBON	1.2K	5%	1/4W	
R911	1-249-420-11	CARBON	1.8K	5%	1/4W	
R912	1-249-422-11	CARBON	2.7K	5%	1/4W	
R913	1-249-424-11	CARBON	3.9K	5%	1/4W	
R914	1-249-427-11	CARBON	6.8K	5%	1/4W	
R915	1-249-431-11	CARBON	15K	5%	1/4W	
R916	1-249-418-11	CARBON	1.2K	5%	1/4W	
R917	1-249-420-11	CARBON	1.8K	5%	1/4W	
R918	1-249-422-11	CARBON	2.7K	5%	1/4W	
R919	1-249-424-11	CARBON	3.9K	5%	1/4W	
R920	1-249-427-11	CARBON	6.8K	5%	1/4W	
R921	1-249-418-11	CARBON	1.2K	5%	1/4W	
R922	1-249-420-11	CARBON	1.8K	5%	1/4W	
R923	1-249-422-11	CARBON	2.7K	5%	1/4W	
R924	1-249-424-11	CARBON	3.9K	5%	1/4W	
R925	1-249-427-11	CARBON	6.8K	5%	1/4W	
R951	1-249-431-11	CARBON	15K	5%	1/4W	
R952	1-249-419-11	CARBON	1.5K	5%	1/4W	
		< VARIABLE RESISTOR >				
RV901	1-223-373-11	RES, VAR, CARBON 10K (REC LEVEL)				
RV902	1-223-372-11	RES, VAR, CARBON 100K (REC BALANCE)				
		< SWITCH >				
S701	1-554-118-00	SWITCH, PUSH (1 KEY) (POWER)				<POWER SWITCH BOARD>
S901	1-554-303-21	SWITCH, TACTILE (■:DECK A)				
S902	1-554-303-21	SWITCH, TACTILE (▷:DECK A)				
S903	1-554-303-21	SWITCH, TACTILE (◁:DECK A)				
S904	1-554-303-21	SWITCH, TACTILE (◁◁:DECK B)				
S905	1-554-303-21	SWITCH, TACTILE (▷▷:DECK B)				
S906	1-554-303-21	SWITCH, TACTILE (●:DECK B)				
S907	1-554-303-21	SWITCH, TACTILE (■:DECK B)				
S908	1-554-303-21	SWITCH, TACTILE (❚❚:DECK B)				
S909	1-554-303-21	SWITCH, TACTILE (▷:DECK B)				
S910	1-554-303-21	SWITCH, TACTILE (◁:DECK B)				
S911	1-554-303-21	SWITCH, TACTILE (O:DECK B)				
S912	1-554-303-21	SWITCH, TACTILE (◁◁:DECK A)				
S913	1-554-303-21	SWITCH, TACTILE (▷▷:DECK A)				
S914	1-554-303-21	SWITCH, TACTILE (COUNTER MEMORY:DECK A)				
S915	1-554-303-21	SWITCH, TACTILE (COUNTER RESET:DECK A)				
S916	1-554-303-21	SWITCH, TACTILE (AUTO CAL)				
S917	1-554-303-21	SWITCH, TACTILE (HIGH)				
S918	1-554-303-21	SWITCH, TACTILE (NORMAL)				
S919	1-554-303-21	SWITCH, TACTILE (COUNTER RESET:DECK B)				
S920	1-554-303-21	SWITCH, TACTILE (COUNTER MEMORY:DECK B)				
S921	1-692-126-11	SWITCH, SLIDE (DOLBY NR ON/OFF)				
S922	1-692-126-11	SWITCH, SLIDE (DOLBY NR B/C)				
S923	1-692-126-11	SWITCH, SLIDE (DIR MODE)				
		<INDICATOR TUBE>				
VFD901	1-517-162-11	INDICATOR TUBE, FLUORESCENT				
**********						
		MISCELLANEOUS				
		**********				
1	1-690-906-11	WIRE (FLAT TYPE) (9 CORE)				
* 2	1-575-781-11	WIRE, (FLAT TYPE) (9 CORE)				
⚠12	1-551-188-XX	CORD, POWER (E)				
⚠12	1-558-945-21	CORD, POWER (POLAR. SPT-1) (US, Canadian)				
⚠12	1-575-651-21	CORD, POWER (AEP, G)				
⚠12	1-696-586-11	CORD, POWER (UK)				
⚠12	1-696-845-11	CORD, POWER (AUS)				

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
⚠14	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
18	1-465-738-11	REMOTE COMMANDER (Canadian)	
72	1-690-911-11	WIRE (FLAT TYPE) (11 CORE)	
73	1-575-628-11	WIRE, FLAT TYPE (27 CORE)	
121	1-638-983-11	PC BOARD, MOTOR FLEXIBLE	
⚠F701	1-532-285-00	FUSE (1.250A) (AEP, UK, G, E, AUS)	
⚠F701	1-576-103-11	FUSE (1.600A) (US, Canadian)	
⚠F702	1-532-285-00	FUSE (1.250A) (AEP, UK, G, E, AUS)	
⚠F702	1-576-103-11	FUSE (1.600A) (US, Canadian)	
HP101	A-2003-837-F	BASE ASSY, HEAD (PLAYBACK) (DECK-A)	
HRPE101	A-2003-838-A	DECK ASSY, HEAD (PLAYBACK/RECORD/ERASE) (DECK-B)	
M1	X-3359-417-1	MOTOR (CAPSTAN) ASSY	
M2	X-3363-501-1	MOTOR ASSY, REEL	
⚠T701	1-450-837-41	TRANSFORMER, POWER (US, Canadian)	
⚠T701	1-450-838-41	TRANSFORMER, POWER (AEP, UK, G, AUS)	
⚠T701	1-450-839-11	TRANSFORMER, POWER (E)	
⚠VS701	1-692-155-11	SELECTOR, POWER VOLTAGE (VOLTAGE) (E)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-558-271-11	CORD, CONNECTION	
	1-558-271-11	CORD, CONNECTION	
	1-696-170-11	CORD, CONNECTION	
*	3-376-446-01	CUSHION	
*	3-388-323-41	INDIVIDUAL CARTON	
	3-756-406-11	MANUAL, INSTRUCTION (ENGLISH/FRENCH/SPANISH/PORTUGUES) (AEP, E)	
	3-756-406-22	MANUAL, INSTRUCTION (ENGLISH) (US, Canadian, UK, AUS)	
	3-756-406-31	MANUAL, INSTRUCTION (FRENCH) (Canadian)	
	3-756-406-41	MANUAL, INSTRUCTION (GERMAN/DUTCH/SWEDISH/ITALIAN) (AEP)	
	3-756-406-51	MANUAL, INSTRUCTION (GERMAN) (G)	
	3-756-406-61	MANUAL, INSTRUCTION (CHINES) (E)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-682-548-09	SCREW +BVTT 3X8 (S)	
#2	7-682-548-04	SCREW +BVTT 3X8 (S)	
#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#4	7-685-871-01	SCREW +BVTT 3X6 (S)	
#5	7-621-773-95	SCREW +BVTT 2.6X6 (S)	
#6	7-685-134-19	SCREW (+ PTPWH) (2.6X8)	
#7	7-621-849-00	SCREW (BV/RING)	
#8	7-627-556-08	SCREW +P 2.6X2.8	
#9	7-621-775-00	SCREW +B 2.6X3	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

9-957-826-11

Sony Corporation
Audio Group

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TC-WR635S

SONY

SERVICE MANUAL

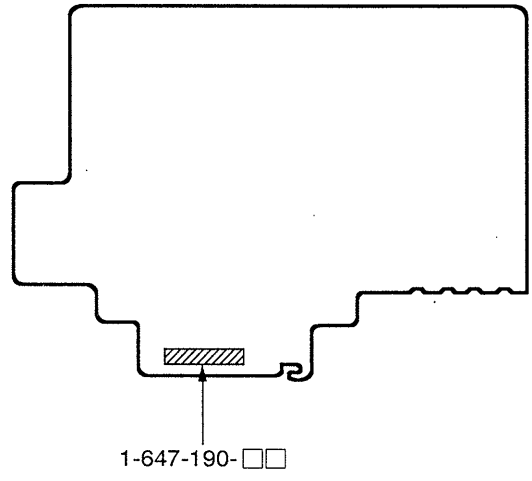
US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model

SUPPLEMENT-1

File this Supplement with the Service Manual.

Subject : Circuit change
(MAIN BOARD 1-647-190-11 ⟶ 1-647-190-13

Main Revised Point : Printed wiring added for DOLBY S CIRCUIT



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• SCHEMATIC DIAGRAM (Service Manual See page 21 – 25)	7

9-957-826-81

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● **ELECTRICAL PARTS LIST** (Service Manual See page 34 – 42)

1-647-190-11 ⟶ 1-647-190-13

Ref. No.	Former Parts Description Parts No.	New Parts Description Parts No.	Remarks
8 (Page 34, 38)	A-2007-019-A (US, Canadian, AEP)	A-2007-019-A MAIN BOARD, COMPLETE (US, AEP) A-2007-147-A MAIN BOARD, COMPLETE (Canadian)	Changed
C133	1-124-902-00 0.47uF	1-124-252-00 ELECT CHIP 0.33uF 20% 50V	Changed
C137	1-124-903-00 1uF	1-124-927-11 ELECT CHIP 4.7uF 20% 50V	Changed
C140	————	1-130-470-00 MYLAR CHIP 820pF 5% 50V (COUNTERMEASURE DOLBY S BOARD)	Added
C141	————	1-130-471-00 MYLAR CHIP 0.001uF 5% 50V (COUNTERMEASURE DOLBY S BOARD)	Added
C142	————	1-130-468-00 MYLAR CHIP 560pF 5% 50V (COUNTERMEASURE DOLBY S BOARD)	Added
C143	————	1-130-476-00 MYLAR CHIP 0.0027uF 5% 50V (COUNTERMEASURE DOLBY S BOARD)	Added
C233	1-124-902-00 0.47uF	1-124-252-00 ELECT CHIP 0.33uF 20% 50V	Changed
C237	1-124-903-00 1uF	1-124-927-11 ELECT CHIP 4.7uF 20% 50V	Changed
C240	————	1-130-470-00 MYLAR CHIP 820pF 5% 50V (COUNTERMEASURE DOLBY S BOARD)	Added
C241	————	1-130-471-00 MYLAR CHIP 0.001uF 5% 50V (COUNTERMEASURE DOLBY S BOARD)	Added
C242	————	1-130-468-00 MYLAR CHIP 560pF 5% 50V (COUNTERMEASURE DOLBY S BOARD)	Added
C243	————	1-130-476-00 MYLAR CHIP 0.0027uF 5% 50V (COUNTERMEASURE DOLBY S BOARD)	Added
C712	1-136-169-00 0.22uF	1-136-169-00 FILM CHIP 0.22uF 5% 50V (G) (POWER TRANSFORMER BOARD)	Changed
C713	1-136-169-00 0.22uF	1-136-169-00 FILM CHIP 0.22uF 5% 50V (G) (POWER TRANSFORMER BOARD)	Changed
C815	————	1-124-443-00 ELECT CHIP 100uF 20% 10V	Added
CBP501	————	* 1-764-267-11 PIN CONNECTOR (PC BOARD) (COUNTERMEASURE DOLBY S BOARD)	Added
D803	————	8-719-987-63 DIODE IN4148M	Added
L803	1-140-513-11 22uH	1-140-513-11 INDUCTOR 22uH (G)	Changed
Q133	————	8-729-900-89 TRANSISTOR DTC144ES (COUNTERMEASURE DOLBY S BOARD)	Added
Q233	————	8-729-900-89 TRANSISTOR DTC144ES (COUNTERMEASURE DOLBY S BOARD)	Added
Q533	————	8-729-900-89 TRANSISTOR DTC144ES	Added

Ref. No.	Former Parts Description Parts No.	New Parts Description Parts No.	Remarks
Q534	————	8-729-900-65 TRANSISTOR DTA144ES	Added
R140	1-249-417-11 1K	1-249-421-11 CARBON CHIP 2.2K 5% 1/4W	Changed
R159	————	1-249-417-00 CARBON CHIP 1K 5% 1/4W (COUNTERMEASURE DOLBY S BOARD)	Added
R160	————	1-249-434-11 CARBON CHIP 27K 5% 1/4W (COUNTERMEASURE DOLBY S BOARD)	Added
R161	————	1-249-421-11 CARBON CHIP 2.2K 5% 1/4W (COUNTERMEASURE DOLBY S BOARD)	Added
R162	————	1-249-436-11 CARBON CHIP 39K 5% 1/4W (COUNTERMEASURE DOLBY S BOARD)	Added
R240	1-249-417-11 1K	1-249-421-11 CARBON CHIP 2.2K 5% 1/4W	Changed
R259	————	1-249-417-11 CARBON CHIP 1K 5% 1/4W F (COUNTERMEASURE DOLBY S BOARD)	Added
R260	————	1-249-434-11 CARBON CHIP 27K 5% 1/4W (COUNTERMEASURE DOLBY S BOARD)	Added
R261	————	1-249-421-11 CARBON CHIP 2.2K 5% 1/4W F (COUNTERMEASURE DOLBY S BOARD)	Added
R262	————	1-249-436-11 CARBON CHIP 39K 5% 1/4W (COUNTERMEASURE DOLBY S BOARD)	Added
R543	————	1-249-431-11 CARBON CHIP 15K 5% 1/4W	Added
R847	1-249-432-11 18K	1-249-433-11 CARBON CHIP 22K 5% 1/4W	Changed
R848	1-247-848-11 5.1K	1-247-852-11 CARBON CHIP 7.5K 5% 1/4W	Changed
R869	————	1-249-436-11 CARBON CHIP 39K 5% 1/4W	Added

● Countermeasure DOLBY S BOARD (1-650-477-11) is included on the MAIN BOARD.

● PRINTED WIRING BOARDS

● SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
D131	G - 22	Q101	E - 16
D231	G - 22	Q121	B - 18
D501	F - 17	Q131	E - 17
D502	E - 18	Q132	E - 22
D531	D - 22	Q133	A - 18
D551	D - 14	Q201	C - 16
D552	D - 13	Q221	B - 17
D553	D - 14	Q231	C - 17
D554	D - 13	Q232	E - 22
D561	B - 13	Q233	A - 19
D562	B - 13	Q501	F - 17
D701	B - 23	Q502	F - 17
D702	B - 23	Q503	F - 16
D703	C - 23	Q504	F - 16
D704	C - 23	Q505	F - 17
D705	B - 24	Q521	B - 18
D706	B - 23	Q531	D - 22
D707	D - 23	Q532	G - 19
D708	E - 24	Q533	G - 21
D709	B - 23	Q534	G - 22
D710	B - 21	Q535	F - 22
D711	C - 21	Q561	B - 13
D712	C - 20	Q562	B - 13
D713	D - 22	Q701	B - 23
D714	D - 22	Q702	B - 22
D715	B - 24	Q703	B - 23
D716	B - 21	Q704	B - 21
D801	G - 13	Q705	B - 21
D802	I - 17	Q706	D - 21
D803	G - 22	Q707	D - 22
IC151	E - 13	Q708	D - 22
IC251	C - 13	Q803	J - 18
IC501	D - 15	Q804	G - 14
IC502	D - 19	Q805	G - 14
IC503	D - 18	Q806	I - 17
IC504	B - 13	Q807	I - 17
IC505	B - 16	Q808	I - 17
IC701	C - 21	Q809	F - 15
IC801	I - 21	Q810	G - 21
IC802	H - 23		
IC803	G - 25	CP151	E - 13
IC804	H - 16	CP251	C - 13
IC805	H - 15		
IC806	G - 22		
IC901	J - 32		

Note:

- ○— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▒ : Pattern on the side which is seen.
- ▭ : Chip components extracted from the rear side.
- G : Germany
  AUS : Australian

【COUNTERMEASURE DOLBY S BOARD】

【MAIN BOARD】

【HEADPHONE BOARD】

US,Canadian MODEL

【POWER TRANSFORMER BOARD】

AEP,UK,G,Australian MODEL

【POWER TRANSFORMER BOARD】

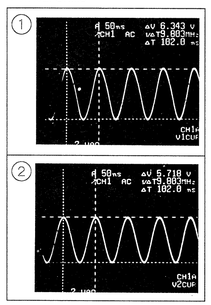
E MODEL

【POWER TRANSFORMER BOARD】

【POWER SWITCH BOARD】

【PANEL BOARD】

● WAVEFORMS



Note :

- All capacitors are in μ F unless otherwise noted. pF: μ μ F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.
- ⚠ : fusible resistor.

Note :	Note :
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ═══ : B+ Line
- ▭ ▭ ▭ : B − Line
- ┌──┐ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : STOP
  ( ) : REC
  ( ) : CAL SW ON
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ▷ : PB (DECK A)
  ▷▷ : REC (DECK B)
  ▭▷ : PB (DECK B)
- G : Germany
  AUS : Australian